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THE UNIVERSITY OF ALBERTA

CORRELATES OF THE OCCUPATIONAL ROLE IDENTITY OF AN ORGANIZATIONAL PROFESSIONAL: A STUDY OF CANADIAN HOSPITAL ADMINISTRATORS

BY

(C) JANET LYNN STORCH

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE

OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF SOCIOLOGY

EDMONTON, ALBERTA

FALL 1987

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research for acceptance, a thesis entitled CORRELATES OF THE OCCUPATIONAL ROLE IDENTITY OF AN ORGANIZATIONAL PROFESSIONAL: A STUDY OF CANADIAN HOSPITAL ADMINISTRATORS submitted by JANET LYNN STORCH in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

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Supervisor

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.....

Date: Sept 25/81

TO DON

who has stood beside me through

25 years of marriage, three children

and three degrees.

ABSTRACT

The purpose of this study was to investigate the relative influence of education and work experience in developing and maintaining an occupational role identity, and to assess the degree of compatibility between a professional role identity and an organizational role identity. The occupational group studied was hospital administrators, specifically the chief executive officers of all English language hospitals over 100 beds in Canada. Following an analysis of the development of hospital administration as an occupation in Canada (based on Larson's framework for evaluating the social resources available to a professionalizing occupational group), the occupational role identity of hospital administrators was studied using a mailed questionnaire. Hall's Professional Inventory scales and a number of other scales were adapted (and new items were developed) to measure professional and organizational dimensions of occupational role identity. Results of the analysis of the survey data indicated no strong linear relationships between length or type of education, or between number of organizations worked for or length of work experience, and the dimensions of occupational role identity. Although some interactions were evident, the variance explained was very modest. A number of explanations for these limited findings were suggested, including the need to reconsider the theoretical orientation and the importance of ensuring appropriate use of Hall's Professional Inventory scales.

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CHAPTER I

INTRODUCTION

Within the sociological literature, the professions have commanded considerable attention. The terms "profession" and "professionalization" have been variously defined depending on the theoretical perspective taken. From a functionalist perspective, profession is a term ascribed to an occupational group which possesses certain attributes, principally a specialized body of knowledge and an ideal of service (Goode,1969); and which has taken a number of steps towards becoming a distinct self-regulating occupational group, such as, establishing a training school, forming a professional association and developing a code of ethics (Wilensky, 1964). While there is much debate about which groups actually fall into the category of a profession, there has been an increasing recognition that professions evolve and various occupations may exist at different stages of professionalization (Wilensky, 1964).

Apart from the broader debate about which occupational groups are or are not professions, two related areas of study have often yielded conflicting and contradictory results. One of these areas concerns the effects of the formal socialization of professionals as opposed to the effects of work experience in establishing a professional identity; the other concerns the relative compatibility of professional and organizational goals and values.

It is the purpose of this study to attempt to add some clarity to these debates by investigating the relative influence of education

and the effects of work experience in developing and maintaining an occupational (professional or organizational) role identity; and by assessing the degree of compatibility between a professional role identity and an organizational role identity. Further, in selecting hospital administrators for study, the investigator hopes to contribute some data and some insights about the attitudes, values and self-concepts of this type of organizational professional. Distinct from the mythical "free" professionals who operate as independent practitioners in exchange relations with clients, organizational professionals are generated by bureaucracies and by the "expansion of the bureaucratic apparatus of the state" (Larson, 1977:179). This expansion creates the need for a cadre of professionals employed by organizations to supply services related to education, welfare, and regulatory activities (such as teachers, librarians, social workers and city planners), as well as professional expertise for administrative and managerial functions. These professionals are necessarily dependent on the organization to market their expertise. Hospital administrators are organizational professionals necessitated by the increasing managerial functions required by the expansion of health care bureaucracies (Larson, 1977).

Hospital administrators as a study population provide some unique characteristics against which to examine the theoretical debates in question. Within the past twenty years there has been considerable effort devoted to professionalizing Canadian hospital administrators and a number of structural features of professionalism have been

developed. One structural feature not yet in place is control of entry to practice; thus, to use Wilensky's term (1962), the recruitment base is "still quite heterogenous", and a variety of quite diverse educational programs in hospital/health administration continues to exist. This wide variation should allow for identification of the relative influence of levels of education on an occupational role identity. Second, in the debate regarding professional and bureaucratic value conflicts, hospital administrators as "specialized professional" administrators (Etzioni, 1964) also present a special case for study. Given that the major social role of the hospital administrator may be seen as managing the hospital bureaucracy, there is some question about how a professional role identity fits into the organizational role identity demanded of the position. Do hospital administrators manifest attitudes of professionalism? If so, how does this square with the necessity of their organizational commitment? And what major factors influence these perspectives?

IMPORTANCE OF THE TOPIC

First of all, this type of research should add to our understanding of the relative influences of professional socialization and organizational socialization (or the effects of work experience), an important point of debate for those who study the professions and for those who educate professionals. Extensive education is considered to be essential for instilling in recruits to the profession the particular knowledge, skills, attitudes, values,

and self-concepts of being a "profession" that set these individuals apart from other workers (Goode, 1961). If the professional socialization component of professional education produces no enduring values, this central quality of a profession is called into question. And if the influence of professional education in instilling a set of professional values, attitudes and self-concepts is negated by subsequent organizational socialization, educators may want to carefully consider their approaches and objectives.

A second potential contribution of this study rests on the long-standing debate regarding professional and bureaucratic conflict. Underlying this debate is the assumption that being a professional may require a type of autonomy antithetical to the model of bureaucracy depicted by Weber (1968). Weber's 'ideal type' of bureaucracy, which involves jurisdictional areas ordered by rules and regulations, assignment of duties, and supervision of lower offices by the higher ones; and the notion of "free" professionals making independent decisions relative to the choice, timing and execution of their duties, would seem incompatible.

> At the level of the individual, professional expectations of autonomy and professional frames of reference lead some analysts to predict socio-psychological tensions: they are seen to derive from the contradictions between the 'personality' of the expert or professional, re-inforced by his background and orientations, and that of the bureaucrat or manager (Larson, 1977:190).

There may also be conflict between professional values and organizational values, and the individual's orientation to a professional community versus the expectation that he should be an

"organization man" (Hall, 1969; Abercrombie et al., 1984). Thus, a potential anomaly exists when the professional is also the chief bureaucrat. In such a situation, the relative compatibility of professional and organizational role identities would be of particular interest, and this study could add to our understanding of these organizational professionals in that regard.

A third contribution of the study centers on the fact that hospital administrators have tended to be an understudied group, particularly in the Canadian context. The major Canadian studies to date have been health administration studies focusing on manpower issues, with surveys of opinions relative to knowledge requirements and further educational needs (e.g., Hastings, et al., 1981; Hastings, 1976). In addition, a national study focused on the demographic characteristics and career patterns of women in health administration in Canada (Dixon, 1980), and alumni surveys have been conducted by various graduate programs focusing on position, salary, and reactions to health services curriculum (see for example, Mills, 1979). Although these studies provide useful basic information, including information on the general status of this occupational group, except for a recent study by Meeks (1983), there is a lack of theory based research in this area and limited attention to the study of the values, attitudes and self-concepts of hospital administrators.

Information about the self-concepts, attitudes, and values of hospital administrators should be of interest to educators, professional associations and hospital boards. The social role of

the hospital administrator may be taking on increased importance as these administrators are forced to play a key role in explicit health care rationing decisions. Although the relationship between attitudes and behavior is imperfect, self-conceptions can become a potential indicators of the likely behavior of this occupational group. Therefore, the occupational role identity of hospital administrators may be a potential indicator of the role hospital administrators will assume.

RELEVANT LITERATURE: KEY CONCEPTS

The literature indicates that the development of an occupational role identity is primarily the result of two types of socialization: socialization in a professional training institution and socialization within an employing organization. In the literature related to these types of socialization, it is suggested that the outcomes of these socialization experiences tend to lead to two types of identities, one being a professional role identity and the other an organizational (i.e., a bureaucratic) role identity. Further, there is the theme of potential incompatibility or role identity conflict encompassed in simultaneously holding a professional role identity and an organizational role identity. In this section, literature in each of three areas will be reviewed: a) formal education and the development of a professional role identity, b) work experience and the development of an organizational role identity, and c) professional-organizational value conflicts.

Formal Education and the Development of a Professional Role Identity

The development of a professional role identity has been studied relative to numerous occupational groups with a focus on the influence of the professional school (Becker and Carper, 1956; Merton, 1957; Huntington, 1957; Becker et al., 1961; Oleson and Whittaker, 1968; Olmstad and Paget, 1969; Kadushin, 1969; Bucher and Stelling, 1977; Simpson, 1979; Light, 1979; Chapell and Colwill, 1981; Reid, 1981; Jurek et al., 1987). The assumption in much of this literature is that students, while formally studying to become doctors, dentists, lawyers, nurses, musicians, engineers, etc., learn not only specialized knowledge and technical skills, but acquire the values, attitudes and self-concepts of that professional group (Brim, 1966).

Bucher and Stelling (1977) have defined a professional identity as

> ...the perception of oneself as a professional, and as a particular type of professional...related to the particular skills and knowledge one has, the work one does, and the work-related significant others or reference group (p.213).

Developing a professional role identity inevitably involves a change in an individual's self-concept -- a discovery of oneself as professional (Hughes, 1958:116) and an ability to "think, act and feel" like a member of that particular profession (Merton, 1957b:7).

At least three approaches to the concept of professional socialization have been advanced: an inductive approach, a reactive approach and an interactive approach (Oleson and Whittaker, 1970;

Simpson, 1979; Lurie, 1981; Light, 1983). These three models are not mutually exclusive, and all may be required to explain professional socialization (Lurie, 1981).

The inductive approach, sometimes referred to as a normative approach, views socialization as a process involving the acquisition of skills and behavior patterns constituting the professional role. In this model it tends to be assumed that the professional identity developed will be maintained following graduation and during the work career. This model is most closely associated with the work of Merton (1957b). Academic education and practical training as a student are thus envisioned as primary determinants of a professional role identity because students' "normative acquisitions" are carried into professional practice and serve as guidelines in dealing with role demands (Simpson, 1979). Accordingly, researchers suggest that the degree of professional identity will increase with the length of training (Brim, 1966; Corwin, 1961; Kadushin, 1969; Kerr, VonGlinow and Schriesheim, 1977). However, this claim has been disputed by Alutto et al. (1971) who found that the extent of commitment to professional nursing was not affected by length of program. A number of studies (Becker et al., 1961; Bucher and Stelling, 1977; Kadushin, 1969; Olmsted and Paget, 1969) have identified the importance of role-taking activities in development of a professional self concept. For example, Lortie (1966) suggests that "laymen become lawmen" only partially in law school while the important transformation takes place in work after graduation, and Omlsted and Paget (1969) contend that since medical students are not allowed to

play the role of physician while in school, the young physician is likely to be socialized primarily by his or her patients once in the role of practitioner.

The reactive approach to professional socialization, sometimes referred to as a situational approach, is based on the proposition that situational factors in the work setting determine socialization. Advocates of this position suggest that individuals adjust their values and attitudes to suit each new situation. Thus, while education may influence values and attitudes, the work experience following completion of the formal educational program exerts a much stronger influence in the development of role-identity and may change that identity (Becker et al. 1961; Freidson, 1970; Olmsted and Paget, 1969; Alexander, 1984; Guy, 1985).

A third approach to professional socialization, the interactive approach, suggests that individuals seek socialization through professional training and that their own values lead them to choose certain professions. They respond to other actors in their work situation and decide their professional identity from choosing between limited situational alternatives and available professional role models on the basis of personal compatibility (Light, 1980; Lurie, 1981). Lurie (1981:46), in her study of graduate nurse practitioners, concluded that "professionals first learn what makes them professional and what being a professional is supposed to be. Then they learn the way things are." At that point, personal propensity determines whether they accede to the situation or try to change it.

While studies based on the inductive approach have mainly involved quantitative study, those based on the reactive approach have been largely qualitative studies. A limiting characteristic of the majority of these studies is that the socialization process has focused only on students, and shifts in student values while in training, as opposed to the values and attitudes of practitioners. Two exceptions to this statement are the studies by Lurie (1981) and Chappell and Colville (1981).

Work Experience and the Development of an Organizational Role Identity

There has been on-going study and discussion about the effects of the experience of working in organizations on an individual's values and orientations. Much of this discussion has focused on the influence of bureaucratic structure on personality, suggesting that bureaucracies foster attitudes of inflexibility and conformity (Merton, 1957; Bensman and Lilienfeld, 1973). In the archetypical executive sense, 'the organization man' came to symbolize an individual who totally accepted the organizational goals, took organizational norms as his personal norms, and who believed in and did not question the system (Whyte, 1956; Presthus, 1962).

Organizational identification has been defined as the "...process by which the goals of the organization and those of the individual become increasingly integrated and congruent" (Hall et al., 1970). Frequently discussed under the rubric of organizational commitment, organizational identification can be studied in terms of commitment

related behaviors or commitment as attitude (Mowday et al., 1979). Research on job-related behaviors indicative of commitment has focused on job turnover rates (Marsh and Mannari, 1977), job attendance, and job performance (Porter et al., 1974; Steers, 1977). Organizational identification as an attitudinal construct can be characterized by three factors:

> ...(a) a strong belief in and acceptance of the organization's goals and values; (b) a willingness to exert considerable effort on behalf of the organization; (c) a definite desire to maintain organizational membership (Porter et al., 1974:604).

The development and consequences of organizational identification have been the focus of considerable research. Buchanan (1974) and Steers (1977) concluded that organizational identification or commitment is largely a function of work experience, although personal factors (such as age) and job characteristics may play a part. Job characteristics thought to influence organizational commitment include job challenge, job satisfaction, perceived job autonomy, opportunities for social interaction, extent of feedback provided on the job, group attitudes regarding the organization, and extrinsic rewards (Hall and Schneider, 1972; Buchanan, 1974; Marsh and Mannari, 1977; Steers, 1977). In terms of personal factors influencing organizational identification, higher levels of education and intention to seek advanced education were found to be inversely related to organizational identification (Grusky, 1966; Miller and Wager, 1971; Hrebiniak and Alutto, 1972; Steers, 1977).

Years of total experience in an organization have been found to exhibit a strong positive relationship with organizational commitment amongst foresters (Hall et al., 1970), priests (Hall and Schneider, 1972), teachers and nurses (Hrebiniak and Alutto, 1972; Alutto et al., 1973), and certified public accountants (Sorenson and Sorenson, 1974). Merton (1957a) would explain this phenomenon as a function of bureaucratic intellectuals, over a period of time, accommodating their social values and special knowledge to the needs of the organization. Here organizational commitment or organizational identification is treated as an accrual phenomenon, in which a series of investments commit one to one's role and to the organization (Becker, 1960; Angle and Perry, 1983). Thus, for example, time and energy invested in the organization become valuable resources in an exchange relationship for the privileges of seniority, pension plans, etc., which serve to constrain inter-organizational mobility. Becker (1960) called this a "side-bet theory" of organizational commitment. Angle and Perry (1983:125) suggest that "side-bets can be 'placed' by the focal person, or they may be placed for the person by the system, in the form of impersonal bureaucratic arrangements." Scholl (1981) notes that age and tenure in a single organization have often been used as surrogates for such investment, as evident in the research of Kerr et al. (1977) and Alutto et al. (1973). In some studies, a curvilinear relationship has been found between age, tenure and organizational commitment, where individuals with shorter or longer experience with an organization manifest stronger organizational commitment than those with medium lengths of service who show a lower

commitment to the organization, often accompanied by an increased professional commitment or identification (Sheldon, 1971; Hall et al., 1970). In contrast, Bell and Bell (1972) found that older respondents tended to reference the professional organization more frequently than their younger counterparts. Guy (1985) discovered tenure (length of time in the job) to be a "potent" variable in determining references or orientations of staff and urged that more attention be paid to tenure in studies of professionals in organizations. The influence of both tenure and age on organizational and professional identification clearly merits further study.

Professional and Organizational Value Conflict

The thesis of an inherent conflict between professional and bureaucratic values, commitments or loyalties found considerable support in studies conducted mainly in the 'sixties and early 'seventies (Corwin, 1961; Blau and Scott, 1962; Abrahamson, 1964; Schein, 1968; Sheldon, 1971). Challenges to this thesis have been raised on a number of grounds including the suitability of the occupational groups selected for these studies (Kerr et al., 1977), the way in which professionalism has been measured (Bartol, 1979), the claim that professional and bureaucratic commitments can be compatible under certain conditions which may be specific to occupational groups, individuals, and situations (Wilensky, 1964; Thornton, 1970; Green, 1978; Rotondi, 1980; Guy, 1985), and the failure to consider the phenomena of professions and bureaucracies

within the context of the wider social structure (Davies, 1983).

Kerr et al. (1977) have been particularly critical of researchers' excessive use of engineers as subjects in testing the conflict hypothesis, arguing that indiscriminate use of engineers (who display few characteristics of professionalism (Goldner and Ritti, 1967)) is largely responsible for inconsistencies in the data. Bartol (1979) contends that the measurement of professionalism as a global construct, with arbitrary division into high and low professionalism, rather than considering professionalism as multi-dimensional, may account for disparate research results.

Differences in commitment as a result of either a professional identification or an organizational identification have been discussed under a variety of rubrics (for example, cosmopolitan-local, specialist-institutionalist, etc.) all with the same general meanings (Abrahamson, 1967). In many of these studies, the focus is on the number of ways a professional role identity and an organizational role identity might combine to form distinctive role orientations (Reisman, 1949; Blau and Scott, 1962; Wilensky, 1964; Miller and Wager, 1971). One of the most influential models for such research was developed by Gouldner (1957, 1958) who distinguished between manifest and latent roles and role identities based on a cosmopolitan-local continuum. Glaser (1963), Kornhauser (1962), and Abrahamson (1964) studied scientists working in organizations to test this model and demonstrated the possibility of congruence in organizational and professional goals. Subsequently, several other researchers have directed their efforts towards

validating and refining the cosmopolitan-local construct (Berger and Grimes, 1974; Flango and Brumbaugh, 1974; Tuma and Grimes, 1981).

Although few researchers today would support Corwin's (1961:611) claims that "...bureaucratic and professional conceptions of role, jointly held, prevent adequate fulfillment of either role...", neither would they likely support Guy's (1985) contention that the notion of conflicting loyalties is a myth. Absence of any conflicting loyalties would likely mean that either ideological desensitization or ideological cooptation had occurred (Derber, 1982; See also, Merton, 1957a). The former defensive strategy involves "...disengagement from concern with the social uses and ends of one's work..."; the latter involves "...a redefinition or recasting of goals and moral objectives to make them consistent with organizational imperatives..." (Derber, 1982:180, 185).

The more common approach to the professional-bureaucratic conflict thesis appears to be a moderate position which acknowledges the potential for conflict and for various combinations of professional and organizational identifications contingent upon the type of organization and on the professional group. Relative to hospital administrators, for example, professional values which focus on identifying and meeting unmet community needs (Schulz and Johnson, 1983; Weaver, 1975; Canadian College of Health Service Executives Code of Ethics, 1970) are likely to come in conflict with organizational goals of provision of services which may duplicate existing services but serve to enhance the prestige of the

organization, particularly since administrators have a peculiar responsibility to the organization.

> The commitment of managers is essential for the survival and effectiveness of large work organizations because the fundamental responsibility of management is to maintain the organization in a state of health necessary to carry on its work. Effective management thus presupposes a proprietary concern, a sense of responsibility for and dedication to sustaining the well-being of the organization (Buchanan, 1974:533).

MAJOR HEALTH ADMINISTRATION STUDIES

Of the numerous studies regarding hospital/health administration, the majority of such research has focused on manpower studies and role studies, with only a modest amount of theoretical research. The range and variety of studies is well-represented in the research review provided by Georgopoulos (1975). These studies include investigations related to hospital/health administrative functions, allocation of time, career patterns, competencies, problems, salaries, interests, and attitudes towards particular programs or issues. Many of these studies adopted a comparative focus, for example, comparing administrators' functions in large and in small hospitals, or comparing the socio-demographic characteristics of men and women administrators. Of these studies, a few have been identified as historically and/or substantively significant in adding to an understanding of this organizational professional.

Studies of Hospital/Health Administrators in the United States

In 1929, Davis (1929) undertook the first manpower profile of hospital administrators in the United States surveying 7,610 hospital superintendents relative to background and salary. He found that 37% of this group were physicians, 20% were nurses, 8% were sisters and 21% were laypersons with 4% unclassified. In 1945, the first empirical role study, conducted by Prall through interviews with prominent administrators in hospitals of varying size, focused on major problems confronting hospital administrators. The most pressing problems identified by the 100 elite administrators studied were working with medical staff, personnel management and departmental functioning. Fifteen years later, Dolson (1965) used Prall's classification for a study of the major problems facing hospital administrators and found that while the five top problems were similar, their ordering had changed. Departmental functioning emerged as a priority concern and business and finance moved to a second position ahead of working with medical staff.

Hanson (1961, 1962) conducted a theory-based study designed to test the degree of consensus of role expectation across hospital administrators, hospital board members and community leaders in the Denver metropolitan area. His findings confirmed that "one's obligations to others are dependent upon one's position in a social structure which in turn is defined by the character of the social interaction between one's self and others" (1962:312).

In 1975, Allison, Dowling and Munson surveyed twenty-four selected chief executive officers in four types of U.S. health care

delivery organizations to study the role of "successful" chief executives and to identify determinants of the role studied. This research was based on the assumption that "individual roles are a joint function of environmental, organizational and individual influences" (p.149). Katz and Kahn's categories of organizational activities were used to develop a taxonomy of organizational subsystem activities to include adaptive, supportive/boundary, production, maintenance and managerial subsystem activities. Thirty activities were found to be common across administrators in the various settings with a relatively great concern for adaptive type activities, such as long-range planning. An interesting finding related to determinants of role performance was that executives believed experience to have been their best teacher.

Using a national U.S. sample of executives of general hospitals and prepaid group practices, Kuhl (1975) sought to determine the nature of the generic work of health executives and their roles in specific settings. Four main areas of managerial work were identified as internal management, organizational development, external relations and environmental surveillance. Kuhl found that hospital executives tended to be concerned primarily with on-going operations of the hospital, closely conforming to the traditional administrative role.

In another study published in 1975, Weaver interviewed 111 hospital administrators from various sizes and types of hospitals in California to determine their major activities, problems, and career paths. He found that "explaining work routines to and evaluating the

performance of subordinates" were the prime activities of health administrators, generally suggesting that hospital administrators see their role as conserving and protecting the institution (p.176). Major problems cited were budgeting and finance, regulations and laws, and planning and supervising the physical plant. In terms of problems with role partners, physicians and nurses were a common source of problems for health administrators. Weaver found that few of the health administrators had university degrees, and that all had come to their present position with previous administrative experience, largely in health care.

A more recent U.S. study specific to the role of the hospital CEO (Chief Executive Officer) was based on a national random sample of affiliates of the American College of Hospital Administrators (FACHA, 1984). These executives were asked to first identify the CEO's ideal role in relation to governance, planning and organizing, quality of medical care, allocation of resources, crisis resolution, compliance with regulations, influence in legislation, and range of advocacy. They were then asked to indicate their actual behaviors and their sources of professional satisfaction. Results indicated the production-support functions remain a core activity for hospital CEOs with most CEOs believing their key role to be that of monitoring use of resources and adhering to budget. Maintenance functions (especially personnel matters) were a second core function. A third domain of CEO activity was adaptation functions, i.e., either influencing the hospital's environment or finding means to adapt the

hospital to it. Adaptive strategies of CEOs were found to vary directly with their evaluation of the hospital's environment.

In 1986, Weil and Staum reported on a study comparing hospital CEO roles in traditional free-standing hospitals and multihospital systems. The focus of the study was on actual and perceived autonomy. They found that the additional layer of hierarchy in multi-hospital systems resulted in greater standardization of the CEO role but not in a narrower range of activities. Differences in actual and perceived autonomy were most markedly affected by ownership variables. CEOs of non-profit hospitals and of large hospitals experienced greater actual autonomy, while CEOs in investor-owned hospital systems perceived more autonomy.

Although these studies have contributed to our understanding of variations in role function and key problems perceived by health administrators, there are limitations to the findings. For many of these studies generalizability is limited because of lack of random selection and inattention to the reliability and validity of measures. Exceptions to this latter limitation are the investigations by Allison et al. (1975) and by Weil and Straum (1986). Of note is that only three of the above studies - those by Hanson (1961, 1962), Allison et al. (1975), and Weil and Straum (1986) - were theoretically driven.

Studies of Hospital/Health Administrators in Canada

Two of the earliest health administration manpower studies published in Canada were those by Nightingale, Cameron and Schulman

(1973) and by McLeish and Nightingale (1973). In the former study, alumni of graduate programs and correspondence study programs in health administration were surveyed by mail to determine age, location, present job title, membership in professional organizations, number of hours worked per week, job mobility, salary levels and adequacy of training provided by each of the seven health administration programs. Results indicated that seventy-five percent of these alumni were working in hospitals, with almost 40% working as chief executive officers, another 19% at second level administration, and 19% as department directors; that income varied by size of hospital, type of hospital and age of administrator; that perceptions of the balance between theory and practical skills provided in their educational programs were generally regarded as favorable; and that 70% of alumni had worked in three or less organizations with 24% having worked in only one organization.

The purpose of the McLeish and Nightingale (1973) study, commissioned by the Director General of Health Manpower in Canada, was to develop a preliminary estimate of requirements for health service executive manpower in Canada over a seven year period and to outline a methodology for further research. Using data obtained from senior health officials in provincial capitals across Canada, these researchers arrived at an estimate of 4,585 existing administrators, and estimated a need for an additional 401 health administrators. Probably a more significant contribution of this study was the definition of the health service executive as:

> all those persons with senior management responsibility in the health care system throughout Canada whose duties involve planning, and policy-making (or participation in these functions) in positions associated with: hospitals (acute general, mental, rehabilitation, and extended care); armed services hospitals; nursing homes; community health centers; group practices; regional, provincial, and national boards or departments of health; and hospital, health, and medical consultant firms (McLeish and Nightingale, 1973:2).

Two major Canadian health administrator studies were conducted in the late seventies, the Ontario Health Administrator Survey (Hastings, 1976) and the Canadian Health Administrator Study (Hastings, Mindall, Browne and Barnsley, 1981). The purpose of these studies was to provide comprehensive baseline data on numbers and distribution of health administrators, to provide supplementary sociodemographic data, to provide information on administrative views regarding knowledge and skill for the successful performances of administrative tasks and to assess interest in continuing education programs. The Canadian study was modeled on the Ontario study and used the same methods. Since both studies yielded similar findings only the results of the national study are summarized here. In that survey, among the 5,883 potential respondents identified with the help of a National Advisory Committee, 4074 useable questionnaires were returned for an overall response rate of 69.3% from the nine health sectors surveyed. Sociodemographic characteristics of respondents included the following data: the largest proportion of administrators were between 41-50 years old; health administrators in senior positions were overwhelmingly male with the percentage of

female CEOs becoming progressively larger as one moved from large teaching hospitals to specialty hospitals, small hospitals and nursing homes; the range of salaries varied considerably; the majority of health administrators had worked in the field at least five years and a substantial number had at least ten years of experience; and the most common certification among hospital CEOs was the hospital organization and management correspondence type courses (H.O.M.) or one year certificate courses specific to health administration, with only a small number of administrators specifically trained in health administration at a graduate level and many administrators having relatively little training or none at all. Findings relative to knowledge areas and skills perceived important for job performance indicated a priority emphasis on "problem solving and decision-making methods; communication skills; knowledge of the organization and operation of relevant sector specific programs or institutions; and effecting and managing change, and evaluation methods" (p.44).

One of the concerns raised in the Canadian Health Administrator Study relative to the status of women in health administration was addressed in a study by Dixon and Barnsley (1980). Based on a survey of 1979 students and new graduates from Canadian master's programs in health administration, these researchers found that women were under-represented at the senior levels of health administration and that their salaries were lower than their male counterparts independent of the particular job setting.

In research designed to test Schein's (1978) "Career Anchor" concept, Meeks (1984) studied CEOs in medium and large-sized hospitals in Canada. The career anchor concept refers to those things which "anchor" an individual's career, and which serve as guides and integrators of experience. Meeks attempted to determine the distribution of career anchors, identifiable career paths associated with career anchors, and those career anchor groups demonstrating the highest level of professional success for hospital administrators. She utilized the five career anchors suggested by Schein (technical competence, managerial competence, security and stability, creativity, and autonomy) and added an additional career anchor of "service to others". She found three main career anchors characterized the CEOs: technical-functional competence (32%), managerial competence (26%), and service (23%). However, she was unable to identify a distinct career path that lead to any one type of group. Of the groups evidencing the most external indicators of success (including size of agency, income, membership on national committees, etc.) the service group was highest with the managerial group next highest.

Health administrators, and specifically hospital administrators in the Canadian setting have been an understudied occupational group, particularly at the theoretical level. The following research is one attempt to add to the literature on hospital administrators (CEOs) in Canada while testing a number of theoretical propositions relative to the development and maintenance of an occupational role-identity, and the compatibility of professional and organizational role identities.

OUTLINE OF THE STUDY

In this chapter the purpose of the study has been defined within the context of relevant literature in the areas of occupational socialization and bureaucratic-professional conflict and accommodation. In addition, a number of major health administrator studies have been reviewed. In chapter two, an analysis of the development of the social role of the hospital administrator and the process of the professionalization of hospital administrators in Canada is undertaken to assess the structural attributes of hospital administration as a profession. This assessment provides a background against which to examine the attitudinal attributes of hospital administrators.

Chapter three includes a description of the underlying theoretical framework and the design of the research, aimed at determining the degree to which the attitudinal attributes of a profession are present in the occupation of hospital administration, and establishes the hypotheses relative to occupational socialization, and to professional and organizational identity compatibility. Findings of the study are reported in Chapters Four and Five with a discussion of these findings provided in Chapter Six. A summary, conclusions and recommendations comprise the final Chapter.

CHAPTER 2

STRUCTURAL ATTRIBUTES OF HOSPITAL ADMINISTRATION AS AN OCCUPATION IN CANADA

In this chapter, the development of the social role of the hospital administrator will be analyzed within the context of the development of the hospital as a social institution. The manner in which this organization-generated occupation, i.e. the hospital administrator, has moved towards professionalism will then be reviewed, with a concluding assessment of the extent to which hospital administrators manifest the structural attributes of a profession. This background is thought necessary to set the stage for the subsequent exploration of correlates of an occupational role identity of hospital administrators because it demonstrates potential impediments to the development and maintenance of professional attitudes.

A number of scholars of the professions have been critical of the use of trait or process models to analyze professions, and have emphasized the need to contextualize professionalism, i.e., to place professionalism in the context of social, cultural and political realities. Freidson (1983:22) suggests that the concept of professions should be treated as a "changing historic concept" rather than a generic concept "with particular roots in an industrial nation strongly influenced by Anglo-American institutions." Vollmer and Mills (1966:62) emphasize that the process of professionalization is "inextricably linked to the kind of society in which

[professionalism] takes place -- its political forms, its cultural norms, and its social structure, as well as its stage of technological development". Larson (1977) has documented the rise of professionalism in numerous occupational groups, identifying the different resources available to different occupational groups at different points in history, which either enabled or deterred them in their quest for professionalism. In her analysis, she emphasizes the configuration of resources available to medicine, which have enabled the medical profession to attain its unique status and prestige. Larson points out the fallacy of medicine becoming the model of professionalism, since it is almost inconceivable that another occupational group would be able to command the same resources to attain that level of professional status.

Hospital administrators, as an occupational group, are presently at a very different point in their professional development than medicine. And, while some models of professionalism would suggest that it is only a matter of time before they might attain the professional position of medicine, an examination of the resources available to hospital administrators is necessary before any such conclusion can be drawn.

Larson (1977) maintains that the success of gaining recognition and legitimation as a professional group is a function of the different resources available in a particular time period including: 1) the saliency of the service marketed, 2) the type of market conditions, 3) the type of clientele, 4) the nature of the cognitive base, 5) the ability to control the "production of producers", 6) the

prevailing power relations, and 7) the affinity with a dominant ideology. For purposes of this analysis, the historical and present conditions favorable and unfavorable to professionalization, as outlined by Larson will be employed.

STRUCTURAL ATTRIBUTES OF HOSPITAL ADMINISTRATION

I. The Nature of the Service that is Marketed

According to Larson (1977), the more salient and the more universal the need for service, the more favorable the situation is for the development of the profession. There is little question that in North America in the 1980's, the hospital as an organization is regarded as an essential service demanded by all (Anderson and Gevitz, 1984). Holzner and Marx (1979) suggest that the hospital is succeeding the church and parliament as an archetypical institution of Western culture. Thus, most occupational groups apparently necessary to the functioning of the modern hospital, including hospital administrators, may come to be regarded by their association with the hospital as important to society.

The centrality of the hospital in society has not always been apparent. Over the course of history hospitals have existed in varying forms and with varying degrees of significance to the society of which they were a part. In ancient Greece, hospitals were temples established in the name of the healing god Asclepius and were orginally dominated by mysticism and superstition, giving way to an emphasis on gymnasiotherapy and environmental therapy, and finally to early medical-surgical therapies. As such, the relevant occupational

groups shifted from priests to physicians. During the Roman period, hospitals patterned after the Greek system of spas and/or therapy, focused mainly on the provision of care for categories of individuals whose recovery was considered to be in the best interests of the state, e.g., the military, gladiators and slaves (Anderson and Gevitz, 1984; MacEachern, 1969).

With the spread of Christianity throughout the Roman Empire, the mission of the hospital changed to a sacred mission with an emphasis on the value of charity, and on ministering to the care of people who did not fit into the system of family care (Rosen, 1963; MacEachern, 1969; Starr, 1982). Religion continued to be the dominant influence in the establishment of hospitals in the Middle Ages with major attention being devoted to the care of the soul. A series of decrees by the ecclesiastical authorities in the 12th Century, forbidding monks to practice surgery and limiting medical activities in general, further impeded developments in medical care, hospital care and nursing care. Meanwhile, Eastern hospitals evidenced substantial development in specialization of hospitals and internal division of labor with administrative functions being carried by physicians. But "wars, politics, and superstition" intervened to halt even this progressive movement in hospital care (MacEachern, 1969; Anderson and Gevitz, 1984).

The renewed interest in learning that occurred during the Renaissance stimulated the re-orientation of existing hospitals and the development of new hospitals in Western Europe receptive to the new, inquiring type of physician. Advances in the sciences also

aided the development of medical science, and thus began the gradual "re-constitution" of the hospital as an institution of medical science rather than an instrument of social welfare (Starr, 1982; MacEachern, 1969). Starr (1982) suggests that this "re-constitution" qualitatively changed the strong communal character of the hospital to the associative structure of a business organization.

The development of the hospital as a social institution in Canada was dominated by the influence of France where, by the early 1600's, hospitals had reached a higher state of perfection relative to other European countries. The establishment of the Hotel Dieu in Quebec in 1639, and the subsequent addition of five other hospitals in Quebec designed mainly for the care of sick Indians, predated the first United States hospitals by some 112 years (Heagerty, 1940). These Canadian hospitals, built under the auspices of the Catholic Church and managed by Catholic sisters, maintained their charitable focus but were mainly regarded as deathhouses for the poor (Anderson and Gevitz, 1984; Heagerty, 1940).

With the discovery of antisepsis, bacteriological science and x-ray in the late 1800's paving the way for effective surgical interventions, and influenced by the Nightingale system of nursing, hospitals became safer institutions, and the growth of hospitals under the auspices of religious orders and secular groups markedly accelerated between 1870 and 1920 (Starr, 1982; Anderson and Gevitz, 1984; Agnew, 1974). The need for hospitals for the practice of scientific medicine became even more acute with the introduction of capital intensive and complex machinery making it prohibitive for an

individual professional to underwrite and house the new tools required for practice (Anderson and Gevitz, 1984; Derber, 1982).

Following World War I, returning doctors, nurses and technicians brought back to Canada new concepts and techniques of medical and hospital care which greatly enhanced the quality of services. In addition, a number of doctors who had served overseas became interested in the administrative tasks of the hospital and took over as administrative heads of some of the leading hospitals in Canada (Agnew, 1974). But, despite the expansion of technology and the attendant expansion of health care functions, hospitals of the 1920's continued to be relatively primitive with a high reliance on voluntary and unpaid labor (Torrance, 1981).

It was not until World War II that the Canadian hospital industry was transformed as the demands for new facilities to house new technologies accelerated (Torrance, 1981). Both physicians and patients began a more extensive use of hospitals: doctors to capitalize on the newer technologies, and patients because some of the voluntary insurance schemes made the cost of a hospital stay less prohibitive. In 1947 the Canadian government aided and abetted the development of hospitals by establishing grants for hospital construction.[1] Although these grants were only a small part of what was to have been a comprehensive plan of health insurance for the Canadian people, they were welcomed by the populace, and particularly by members of the medical profession who needed hospitals to support their expanded practice (Taylor, 1978).

Not surprisingly, the newly developed hospitals soon were overwhelmed by the need for funds to cover operating costs and, following Saskatchewan's lead,[2] the federal government passed the Hospital Insurance and Diagnostic Services Act to come into effect in 1958 (Taylor, 1978). These two federal-provincial programs firmly established the hospital as a key social institution of Canadian society.[3]

Thus, the hospital became a prominent part of Canada's health care system as the universality of need for hospital care was created. And with the growth and expansion of this organization, the need for full-time managers became more critical to the survival and success of the hospital.

II. The Type of Market Conditions: Who Wants the Job?

While the development of hospitals had generated the need for a full time, paid hospital manager or administrator (Anderson and Gevitz, 1984), the qualifications necessary to be administrator were not as apparent. Initially, there were few occupational groups competing for these positions.

Some of the earliest managers were supervisory nurses or physicians who managed the affairs of the hospital in addition to performing their regular tasks. Florence Nightingale can accurately be regarded in this category as one of the first hospital administrators for her management of the hospitals in Scutari and the Crimea, as well as for her role as Superintendent of the Harley Street Nursing Home (Huxley, 1975; Verney, 1970). Her numerous

contributions to the art and science of hospital management have been preserved through her writings, as for example in Notes on Hospitals (1863). In North America it was not uncommon for a supervisory nurse in a smaller hospital to be head of nursing, the personnel officer, the purchasing agent, the receiver of doctors' messages and orders, and the custodian of the nurses' residence (Agnew, 1974). In larger hospitals, particularly following World War II, physicians were more likely to occupy the position of superintendent.

As hospitals began to require that more care and attention be devoted to bookkeeping and financial management, business managers were often hired; gradually the tasks of general management were delegated to these lay managers and this group became a new breed of hospital superintendent. Still, there was an open competition for these positions as individuals were often appointed with little or no experience and might be drawn from the ranks of retired bankers or businessmen, army officers or former municipal employees, since the position "could be filled by anyone with a reasonable degree of intelligence" (Agnew, 1974:125).

As the hospital changed from the "old rhetoric of charitable paternalism superseded by a new vocabulary of scientific management and efficiency" (Starr, 1984:161), a more knowledgeable and skilled manager was required to deal with the complexities of hospital operations. To reflect the increasing significance of the changing role, the title 'superintendent' (implying only supervision) was replaced by the title 'administrator' (implying initiative and leadership in addition to supervision). Wilensky (1962) notes that a

change in label also serves the function of reducing identification with a previous form of practice (occupation) that is less professional. Later name changes to chief executive officer (CEO) and to president have reflected the growing acceptance that hospital organization and management tasks were similar to those of other business enterprises, and consituted evidence of the move toward a corporate identity (MacEachern, 1969; Agnew, 1974).

To fill a void in the field, educational programs in hospital administration began to emerge both at the universities and through certificate home study programs. Graduates of these programs faced little competition in their search for executive positions in hospitals and other health agencies. According to Larson's analytical framework, this lack of competition would have created a favorable market situation for the development of hospital administration as an occupational group. Another condition favorable to professionalism occurred in Canada in 1969 through the federal government's Task Force on the Cost of Health Services in Canada. This Task Force, created to examine the rising costs of health services and to recommend ways to restrain costs, ensured that the market for hospital administrators would continue to grow when they recommended a) that hospital administrators should be licensed, and b) that courses in hospital and health care administration give greater emphasis to management techniques per se (Report of the Task Force on the Cost of Health Service in Canada, 1969). Thus, the power of the state became a valuable resource for this occupational group, and for the education of its recruits.

While the status of the hospital administrator increased as a result of the increasing qualifications and management expertise required to run the modern hospital, the occupation remained open to individuals from a variety of academic and experiential backgrounds. This openness was not seen as particularly problematic when competition for hospital administration positions was limited. In recent years, however, competition for these positions has increased as graduates from business schools compete with graduates of health administration programs, particularly in the United States where the privitization of health care has left considerable scope for competitive markets requiring more business-oriented management techniques (Weil, 1986). In addition, partly in response to a developing over-supply of physicians, there appears to be a renewed interest among physicians in hospital administration as a career.

According to Larson, if the market is competitive, the profession is forced to organize along monopolistic lines. Using medicine as an example, she demonstrates how "irregulars", such as homeopaths, were excluded from the practice of medicine even when their effectiveness was demonstrably parallel to that of the "regular" doctors. Given the diverse entry qualifications of hospital administrators, and the lack of agreement about the best way to become an effective administrator, the possibility of establishing a monopoly (by health administration graduates for example), in this occupation would seem remote.

III. Type of Clientele

Larson (1977) suggests that the more 'universal' and the less organized the clientele, the more favorable the situation is for the profession to develop. While she is able to show how this maxim allowed for the growth of the medical profession while serving as a barrier to the professionalization of engineers, in both examples relatively discrete clientele were identifiable. A very real problem exists, however, in identifying the clientele of the hospital administrator.

Because hospital administrators serve as 'officials' within a bureaucracy, they are expected to accept "a specific duty of fealty to the purpose of the office" (Weber, 1978:959). Weber described these duties by stating that it was "decisive for the modern loyalty to an office that...it does not establish a relationship to a person...but rather is devoted to impersonal and functional purposes". In his 1929 study of hospital administration, Davis emphasized that hospital administration rests on the principle of agency rather than authority.

> The administrator is not a boss but an agent of the chief constituents of the organization. He is an agent for facilitating the performance of their essential functions. Authority vests in him indeed, but by delegation from the impersonal needs of the situation (p.46).

Davis' observations underscore two major features of the role of hospital administrator. First, in identifying the administrator as agent, he defines a position in which there is a delegated autonomy and an autonomy only within limits. The degree of autonomy allowed

is essential to fulfill the functions of the office, which might include, for example, running an efficient organization. Thus, there are intrinsic limits to professionalism imposed by the principle of agency. A second and related feature of the role of the hospital administrator highlighted by Davis, is the notion of being agent for the "chief constituents of the organization". The term constituents implies that the administrator is agent for more than one group. In fact, the hospital administrator appears to have many clientele including the board, medical staff, hospital staff, patients, and, in Canada, government politicians and bureaucrats. This means that problems and priorities of accountability can become enormously complicated, and that the adminstrator's performance is constantly being defined by and evaluated by these various constituent groups.

In the past several years, hospital administration literature has described moral and ethical dilemmas of hospital administration, with a focus on the moral responsibility of the administrator. This exercise has helped to clarify the potentially conflicting interests of the various types of clientele served by the hospital administrator. Protecting and promoting the best interests of hospital patients, protecting the institution's best interests, and owing a primary obligation to the directors or trustees of the hospital can clearly be at cross purposes. And dealing with these conflicting interests may be further complicated by the hospital administrator's obligations to medical, nursing, other health professional staff, and other hospital employees (McCullough, 1985). This means that the hospital administrator is increasingly subject to

political demands, to the delicate task of negotiating competing interests, and to compromise. Anderson and Gevitz (1985:311) suggest that a successful hospital administrator is "one who can satisfy most of the demands of staff and patients while keeping the institution economically viable".

IV. The Cognitive Base of Hospital Administration

One of the prime attributes of a profession is the presence of a specialized and systematic body of knowledge with a degree of substantive theory and technique (Goode, 1969; Jackson, 1970). This knowledge includes a set of assumptions, and an explicit or implicit theory of how the world is and how society is organized (Elliott, 1972). For the profession, this knowledge constitutes a frame of reference which, in turn, structures the conception of problems, the way in which facts are to be interpreted, and the types of explanations which might be constructed (Holzner and Marx, 1979). Larson (1977) suggests that the more scientific the cognitive base, the more favorable the situation is for the profession to develop.

The authority and the autonomy of a profession rest on this knowledge base. Yet, it is not the knowledge itself which produces the autonomy but rather the ability of the occupational group to monopolize both the body of specialized systematic knowledge and its application (Jackson, 1970). From this perspective, the separation of occupation from profession rests on a technical base of knowledge which is considered difficult to acquire and is sufficiently esoteric and abstract to differentiate from common sense knowledge (Holzner

and Marx, 1979). The professional model, therefore, stresses the superiority of one type of cognitive base (a highly specialized and scientific knowledge) over other types of knowledge. In this respect there is an implicit value judgment in the professional model based on class interests which define the nature of privileged knowledge.

According to Holzner and Marx (1979:343), the optimal base for professional-technical knowledge "must be neither too broad, vague or familiar". They therefore suggest that administrators will have some problem in justifying a claim to professional status and prestige because it rests on a technical base which is familiar, rather broad and too close to common sense. Such a knowledge base makes it unlikely that an occupational group would be able to achieve the autonomy and exclusive jurisdiction required to excercise a professional authority (Holzner and Marx, 1979; Wilensky, 1964). Indeed, Wilensky (1964) suggests that all occupations in the human relations field have only tenuous claims to exclusive competence because the types of problems with which they deal are problems of everyday living. "Where everyone can claim to be an expert, there is no expertise" (Larson, 1977:31). Goode (1969:288) suggests that many management studies have aimed at discovering the general principles of management, drawing from sociology and psychology. "However, not only society, but managers themselves, believe that success or failure is not dependent on having been trained in these principles and that a good manager can be an intuitive master without knowing them at all". In many cases the manager is seen as possessing or

needing little more than concrete experience to guide problem-solving activities.

That the cognitive base of health administration is problematic, in that it may be too broad, is illustrated in the formation of the early academic programs for the preparation of hospital administrators. One of the earliest of such programs was established at the University of Chicago in 1934 with its operating base in the Graduate School of Business. An historian describing the origins of this program calls it a

> study of dynamic marginality because the Program in Hospital Administration has been a partial anomaly in the Graduate School of Business in that (with few exceptions) it deals with a particular administrative content, to which are applied the usual functional business and management specialties such as finance, marketing, accounting, and industrial relations. Still, historically, schools of business and management have been regarded as marginal in the traditional academic setting, with departments for each discipline, such as physics, economics, sociology and a host of subdisciplines (Anderson, 1985:5).

The location of many health administration programs in the faculties of medicine has done little to change the basic marginality of health services administration as an academic discipline, although medical faculties may assist in bringing health administration studies under a more 'scientific' guise. A further problem relative to the cognitive base of health administration is that early programs (and even some of the current programs) were oriented to a relatively high degree of apprenticeship training emphasizing the importance of learning by doing as opposed to a more scientific cognitive base. Greenwood (1972) has noted that generally, as an occupation moves to

professionalism, the apprenticeship style of training yields to more formalized education (although with 'intern' periods of training, for example, in law, medicine, accounting), because the function of theory as the basis or groundwork for practice acquires increasing importance.

The first comprehensive text in hospital administration, entitled Hospital Organization and Management was written by Dr. Malcolm T. MacEachern in 1935. With formal training courses unavailable to the majority of hospital administrators, and with few journals available relative to hospital administration, this text (often referred to as the bible of hospital administration) was greeted enthusiastically and served as a prime source of knowledge through to its 3rd edition in 1957. The 1266 pages provide detailed instructions and directives on how to manage a hospital, department by department. The state of knowledge, as embodied in the text, portrays an absorption with institutional detail based on experiential learning. In discussing the qualifications of the administrator, MacEachern suggested that because of the wide variation in size and types of hospitals, there must be corresponding differences in qualifications.

> Administration in a very large hospital is an entirely different problem from management of a small institution, and the very characteristics which would make for success in the former might become a handicap in the latter (MacEachern, 1969:110)

These same differences were acknowledged in the Report of the Task Force on the Costs of Health Services (1969: vol. 2, p. 11) when the recommendation for licensing of hospital administrators stated that

each "hospital should be graded as to the type of license its administrator requires".

> This grade would reflect the complexity of the hospital so that a hospital of a certain grade would demand an administrator with the appropriate educational background, experience and demonstrated competence as represented by a senior or advanced license (p. 11).

Thus, in addition to a diffuse cognitive base, the diversity of settings for practice further complicates the quest for a more definitive cognitive base. This diversity also has the effect of segmenting the occupation (Bucher and Strauss, 1961) with administrators of large hospitals sharing a different sense of mission and different colleagueship than administrators of small hospitals. Differences may also be found across types of hospitals.

Wilensky (1962:21) emphasizes a lack of exclusiveness to the hospital administrator's area of competence when he points out that an administrative job requires that one be a "jack of many trades" including planner, labor relations expert, purchasing agent, public relations man and public accountant.

In recent years, attempts have been made to identify core knowledge for health administrators. In developing test items for certification exams, for example, the Canadian College of Health Service Executives (the 'professional' body for hospital administrators in Canada)[4] has identified core knowledge as falling within three broad areas: organizational concerns (including structure, human resources, financial and information processes and management processes); client needs (including needs identification,

delivery systems, and evaluation of effectiveness); and operational environment (including history, law and economics, professional development, and interrelationships of related professions) (CCHSE, Certification, 1986). Increasingly, there is a call to identify and to develop

> a theory and practice of health care management that recognizes the special characteristics of health care without allowing those special characteristics to become an excuse for lassitude, poor management, or economic waste (Vladeck, 1985).

According to the professional model, then, the cognitive base of hospital administration is, as yet, neither well-defined nor standardized; and given that the knowledge base is not to any substantial extent esoteric or highly scientific, these deficiencies present serious barriers to the professionalization of hospital administrators.

V. The Production of Producers

Larson (1977) suggests that the more standardized the educational process, the more institutionalized its forms, and the more it is under the control of the profession, the more favorable the situation will be for the development of that profession. She further states that

> the standardization allowed by a common and clearly defined basis of training is far more important for the unification of a profession than the more diffuse subcultural aspects, which are often underscored as major aspects of a socialization process and arbitrarily distinguished from the cognitive and technical basis (p.45).

This is because a standardized basis of training defines a common vocabulary, as well as the tacit knowledge that can distinguish the profession from the laity. She maintains that this basis is the mainstay of a professional subculture, and if professions do not have a common basis of training they tend to create and reiterate pure mannerisms, such as "unnecessary jargon or unjustifiably esoteric techniques or 'pseudo-paradigmatic' changes" (p.45).

Assuming Larson is correct in identifying the importance of standardization of the educational process and the importance of having that process under the control of the profession, the lack of these pre-requisites in hospital administration stand as major barriers to professionalization. In this section, the development of early educational programs for hospital administrators, under the auspices of the hospital association, will be discussed. The development of a Canadian professional association for health administrators, and this association's attempts to improve educational opportunities for recruits to the profession, to provide continuing education for members, to consider control by licensure, and finally to attempt some degree of standardization by certification examinations, will be described.

Development of Early Educational Programs. The question of training for the professional role surfaces early in the development of an occupational group. This stimulus may come from early recruits, from a client public or from members of a professional association who generally attempt to begin training schools within

universities or, at least, seek later contact with universities (Wilensky, 1963). The first university program in hospital administration in Canada began in 1947 at the University of Toronto largely at the initiation of the Kellogg Foundation[5] (Agnew, 1974; Weeks and Berman, 1985). But the major early development of educational programs for hospital administrators in Canada illustrates the reality of this group being called an "organizational professional". In contrast to the usual pattern of educational programs being developed by professional associations or mainly in conjuction with universities, a substantial program for the education of hospital administrators was developed and offered under the auspices of the Canadian Hospital Association.

As hospitals grew in size, numbers and level of complexity, hospital associations developed to fill the need for education and for information exchange, as well as to represent hospitals collectively (Agnew, 1974). Beginning in 1907, the first attempt to form the national Canadian Hospital Association was launched,[6] designed for hospital superintendents and their assistants, and broadened one year later to include hospital trustees. By 1911 the CHA was attempting to amalgamate the CHA with the Association of Superintendents of Training Schools and the Graduate Nurses Association. However, the CHA's Annual Meeting was cancelled when war began in 1914 and did not revive.

Meanwhile, the Catholic Hospital Association of the United States and Canada was formed in 1915, spawning a number of regional associations or conferences; and many provincial hospital

associations were established.[7] In 1927 the Canadian Medical Association set up first a Committee on Hospital Efficiency and then a Department of Hospital Services for the purposes of treating "sick hospitals". These activities facilitated the 1931 development of the Council of Canadian Hospitals, later called the Canadian Hospital Association (Agnew, 1974). In 1950 the Canadian Hospital Association declared its intent to provide formal training programs for persons engaged in hospital administration (Canadian Hospital, 1950a). By May 1951, with the financial support of the W.K. Kellogg Foundation, the availability of the extension course was announced with a curriculum designed to meet the needs of practicing administrators in widely dispersed geographic areas (Canadian Hospital, 1951). This course, designed and conducted by CHA, was formally known as the Hospital Organization and Management Certificate Program (HOM).

The concept of the two year extension program (with its yearly 2-3 week intramural sessions) had been designed to provide an education for those hospital administrators unable to take advantage of the University of Toronto Program in Hospital Administration. At the time of the inception of the HOM, it was expected that the course would be required for only a few years to upgrade the knowledge and skills of hospital administrators (OHA, 1977). That the course (revised and updated) continues to be offered by the Canadian Hospital Association in the 1980's, and is a recognized credential in the field of health care administration, bespeaks of the organization's continuing interest in having a part in "producing the producers". As of December 31, 1986 the HOM/HSM course had graduated

a total of 2,744 administrators (CHA, Education Department, 1986 Report). In 1962, the University of Saskatchewan graduated its first class in the correspondence course of hospital and health care administration with a particular emphasis on managing the small prairie hospital, providing yet another "informal entry credential for department heads wishing to move into senior health services management" (Phin, 1978:45). This program, initiated by the Saskatchewan Hospital Association, continues as a viable entry point to senior hospital management.

Meanwhile, further developments in graduate level education of hospital/health administrators occurred as master's programs in health services administration were established at the University of Montreal (1956), the University of Ottawa (1964), the University of Alberta (1968), the University of British Columbia (1971) (Agnew, 1974), and Dalhousie University (1980). During the 1960's these programs moved from an institution-based, vocationally-oriented focus in hospital administration to a broader, more academic focus in health care administration (Agnew, 1974). The basic cognitive foundation for these broadened programs has been identified as policy evaluation and planning, applied social sciences, and quantitative techniques (Meilicke, 1978).

Formation of a Canadian professional association for health administrators. With an increased entry of master's graduates in health services administration, augmented by the growing numbers of HOM graduates, the 'need' arose for a personal-based membership in a

professional association for health executives separate from the institution-based association of hospitals.

In the Fall of 1967, a Committee was established by the Canadian Hospital Association "to study the feasibility and desirability of forming a Canadian College of Hospital Administrators" (CHA, 1967). By May 1969 recommendations brought forward by the Committee were that such an organization should be formed as a national coordinating body of provincial hospital administrator associations whose primary objective should be the development of educational programs for the up-grading of hospital administrators (CHA, 1969). It was also recommended that the new group not duplicate the types of activities already being carried out in Canada by the American College of Hospital Administrators, which had been formed in 1933 (Agnew, 1974). The founding meeting of the Hospital Administrators' Council of Canada was held in conjunction with the Canadian Hospital Association Convention in 1970 (HACC, 1970).

Although the name Council was chosen in deference to the American College of Hospital Administrators (so as not to appear to be duplicating activities or competing with the American College, in which many Canadian hospital administrators held membership), the issue of selecting a name which would include administrators in other health agencies, as well as in hospitals, was an early agenda item. It should be noted that this progression of health services administration graduates to establish a professional association and thence a name change to health executives is not unlike the sequence outlined by Wilensky (1964). But while most groups change the name

of the occupation to restrict the field, Canadian hospital administrators took steps to expand the field from hospital executives to health services executives. At the same time an attempt was made to restrict eligibility for direct personal membership in the Council to those with three years of senior management responsibility who were involved in formulating and implementing major policy. Apparently, determining how this restriction should apply proved to be problematic, since a further definition was found necessary to permit greater flexibility:

> In general, a senior management position is a position in the organizational structure not more than one step removed from the chief executive officer. In [the case of managers in] large institutions, however, the credentials committee may make decisions regarding membership based on the responsibilities of the particular position (HACC, 1970b).

At the first annual meeting of the Council in June 1971, the name of the Council was changed to the Canadian College[8] of Health Service Executives (HACC, 1971) and approximately 270 active members were accepted. At this, the first induction ceremony into the College, the importance of being a 'professional' health care administrator, with a need for more intensive educational preparation and dedication to public service, was emphasized (Hughes, 1971).

In choosing the name 'college' the Canadian group seemed intent on following the lead of their American counterparts in imitating the medical model of professional organization, where fellowships in a College are obtained through demonstration of credentials. In this way, hospital administrators may have attempted to identify with a more powerful constituency (Strasser and Loebs, 1985).

Activity was soon focused on developing continuing education for members, including a proposal to set up a combination home study and university or college attendance program at a baccalaureate level. Attention was also, of necessity, directed towards the financial support of this fledgling association, resulting in a proposal to the W.K.Kellogg Foundation. This proposal requested general support, as well as support for professional development workshops and professional publications, for public education regarding the role of the health services manager, and for the promotion of a national baccalaurate extension program (Canadian Hospital, 1973).

Through-out much of its history, the College seems to have struggled with its place and its strategy as a professional organization, vascillating between what Turner and Hodge (1970) describe as a "community approach" and a "formal approach" to professional organization. In a "community approach", the emphasis is on a sharing of common interest, developing informal social networks and developing a feeling of solidarity of those carrying out similar activities. In a "formal approach" to professional organization the emphasis is on enumeration, registration, licensure of those competent to practice, codifying standards of conduct, and applying formal controls over members (Turner and Hodge, 1970).

Baccalaureate education for health service administrators. In an effort to improve the standard of education of occupational members and new recruits, attention was directed to establishing baccalaurate programs in health administration. With the help of yet another

Kellogg Foundation Grant, a National Co-ordinating Council for Baccalaureate Education development was established by the CCHSE in November 1976. The Council agreed to a three year plan designed to bring together practitioners and faculty from universities in a cooperative effort to shape and develop educational programs. Three institutions of higher learning (the University of Saskatchewan, Atkinson College of York University, and Ryerson Polytechnical Institute) were participating partners in the venture to provide baccalaurate education in health services administration, while several of the graduate programs agreed to enter into contract with CCHSE to develop course materials for these programs (NCC, 1976). By the conclusion of the grant period, the three baccalaureate programs were underway with the Ryerson program re-locating to the Canadian School of Management. The role of CCHSE, the professional association, in the 'production of producers', at least at the baccalaureate level, was clearly a major accomplishment. Meanwhile, the CHA continued to offer the HCOM (HOM being broadened to Health Care Organization and Management) program with no articulation with health services administration baccalaureate programs until the early 1980's when it was revised (with the assistance of Kellogg funding) to become a Health Services Management certificate program (HSM). With that revision the program then began to include two university courses in management theory at recognized universities. With a steady annual intake of approximately 125 students into the largely extramural study program, the HSM (HOM or HCOM) remains a common credential for health administrators in Canada.

Licensure of hospital administrators. "The only hospital workers not requiring some form of license are maids and administrators" (Agnew, 1974:141). Although shaping and influencing educational programs are a means of influencing/controlling the production of producers, a related and potentially effective means of control is to license professionals, thereby restricting those allowed to practice. "An occupation with pretensions to professional status cannot afford to be seen as a refuge for the unqualified. Good intentions will no longer be enough" (Elliott, 1972:112).

Given that the issue of licensure of hospital administrators had been raised in the federal government's Task Force on the Cost of Health Services in the late 1960's, it is somewhat surprising that pressure for licensure did not surface in a major way in the College until the late 1970's. An internal task force on licensure and managerial performance appraisal was formed by the College at that time with a mandate to make recommendations to the College Board. While a previous survey of members had indicated that over 50% of members who responded favored licensure for health care executives, the College Task Force members were not convinced that respondents had had sufficient understanding of the meaning of licensure (as opposed to registration or certification) or the significance and consequences of licensure. A critical set of questions were posed by the College Task Force:

1. Can the unregulated practice of health administration harm or endanger the public? The potential for harm should be demonstrable and documented.

2. Is there some other method of determining competence in order to protect the public?
3. How will the public benefit by the assurance of an initial level of education through licensure and continuing competence through re-licensure? The Canadian College of Health Service Executives, if requesting licensure, should be able to outline these benefits.

.....

8. Who should grant the license to a health service executive? (CCHSE, 1978, Appendix G:2-3).

Clearly the Task Force members recognized a crucial structural element of professionalism as the claim to autonomy. At the same time, this claim to autonomy loses its point unless it can be demonstrated that serious harm may result because of unethical or incompetent work by practitioners (Goode, 1969:296).

While recognizing that licensure confers some benefits, Task Force members also recognized that licensure can become restrictive, and that public interest might better be served by not introducing such restrictions. Further, members identified several checks and balances already in place to assess competence (such as, reviews of managerial performance by governing boards, accreditation of the organization, and peer pressure). They were sensitive, too, to the fact that governments were disinclined to allow restrictive licensing for newer professional groups. On a more practical level, the broad definition of health administration was perceived as a major obstacle to licensure.

Noting, further, that 1) there was a lack of public interest and debate on licensing of health managers, 2) that many College members were "already licensed, registered or certified in a discipline", and

that 3) under Canada's constitution such licensing would be a provincial responsibility and therefore the locus of the licensing function could not be centralized at the federal level, the Task Force presented a strong recommendation that the College not proceed to develop a licensure process (CCHSE, 1978). In accepting these recommendations, the CCHSE Board agreed to

> a) adopt as College policy a position of opposition to licensure at this time in the development of the profession,
> b) communicate this policy to the federal and provincial governments,
> c) inform those governments that if they decide to proceed with a licensing program for health executives, the College would like to be involved and consulted (CCHSE, 1978:5).

Certification and Fellowship. With the decision not to pursue licensure, College activities began to focus on other types of approaches to developing and promoting educational and professional standards for health service executives. A less restrictive approach to standard setting appeared to rest in the route of voluntary certification. In this approach, members who meet certain standards (e.g., satisfactory completion of an examination measuring basic knowledge) are awarded a credential by a private or voluntary agency and are given the right to use the credential attesting to competence.[9] Despite the fact that certification is voluntary, it may become a restrictive method if employers require certification (Richmond, 1986).

In June 1981, the Canadian College established a Certification and Fellowship Committee to bring in recommendations on

credentialling programs. The Committee concluded that the first step in standard-setting and credentialling health executives should rest with certification and that fellowship should "represent a different type and level" of achievement (Richmond, 1978). Although the Committee recommended that College members be notified that entrance standards for certification would be raised to that of a university degree at a future date (approximately 5 years hence), the CCHSE Board chose to maintain the current broadly based entrance requirements, and the first certification examinations were offered to active members in December 1983.

> The decision not to raise standards had the effect of continuing to provide access to educational programs and a credentialling process for those practitioners without academic degrees. To raise standards and restrict entry would take away these programs for those who perhaps benefit from them the most (Richmond, 1986:Chap.5:p9).

Fellowship was to be an earned award with certified applicants being rigorously screened before acceptance into the program which would require a written submission (a thesis, case studies, or an outstanding record of professional achievement). In this sense, fellowship was envisioned as the capstone of a career. The first Fellowships were awarded by CCHSE in June 1985.

It seems clear that in spite of all the activity aimed at educational programs for health administrators, the field of hospital/health administration in Canada remains what Freidson (1970) would term an "incompletely closed profession." While the professional body (CCHSE) has had some impact on improving education for health service administrators, the education of hospital

administrators is far from standardized or under the control of a professional body. The influence of the 'employer association' on educational programming is evident by the fact that the HOM/HSM program offered by the Canadian Hospital Association continues to be a common credential for administrators. Further, the entry to practice varies widely with baccalaureate or masters education in health services education generally preferred but not required. Thus, the diverse education of hospital administrators is, and will likely remain, a serious deterrent to professionalization.

VI. The Power Relations

Undoubtedly one of the less favorable conditions for the development of the profession of hospital administration is the relatively powerless position of hospital administrators within the power structures of health care. This relative powerlessness occurs for a number of reasons. First, the hospital is one of the most complex bureaucracies of modern time; second, the nature of the administrator's job requires a close working relationship with the powerful profession of medicine; and third, the nature of Canada's national health insurance programs forces hospital administrators into a working relationship with government bureaucrats and politicians.

The hospital administrator's role as agent to facilitate the performance of essential functions of the hospital has been discussed previously. Restrictions on autonomy and power imposed by this state of agency are similar to those faced by administrators of other types

of organizations. What makes the hospital administrator's role different from other administrators, however, is the combination of key differences between a health care organization and other business or service organizations. Shortell and Kaluzny (1983) have summarized the most frequently acknowledged differences as the following:

1. Defining and measuring output is difficult.
2. The work involved is felt to be more highly variable and complex than in other organizations.
3. More of the work is of an emergency and nondeferrable nature.
4. The work permits little tolerance for ambiguity or error.
5. The work activities are highly interdependent, requiring a high degree of coordination among diverse professional groups.
6. The work involves an extremely high degree of specialization.
7. Organizational participants are highly professionalized, and their primary loyalty belongs to the profession rather than to the organization.
8. There exists little effective organizational or management control over the group most responsible for generating work and expenditures: physicians.
9. In many health care organizations, particularly hospitals, there exist dual lines of authority, which create problems of coordination and accountability and confusion of roles (pp. 13-14).

The authors note that while other organizations may possess a few of these traits, health care organizations, and particularly hospitals, are unusual in that many of them have all nine characteristics in combination.

The high degree of specialization and the necessity for task interdependence makes the hospital administrator's role as coordinator critical for goal attainment. Yet, in playing the coordinator and facilitator role, the hospital administrator is

dependent on these specialists for accurate technical information. Further, the fact that the majority of specialists are professionalized means that administrators who find the means they employ to achieve given ends at odds with professional standards or directives, may find themselves having to negotiate with powerful interest groups.

Some time ago, Lentz (1957) described the difficulty hospital administrators encounter by comparing them to business managers. In business, power and prestige are accorded to the administrative groups with the production workers having a lower status. In contrast, in hospitals the honor and prestige go to the production workers, namely, the doctors and nurses.

A second key problem in being able to operate from a base of power is that hospital administrators must necessarily interact with members of the medical profession, the most powerful health care professional group, over whom they have little effective managerial control. Larson (1977:38) maintains that it is difficult to find a profession, besides medicine, "that dominates a role set constituted in large part by highly skilled and highly prized occupations often regarded themselves as professions by their members and the public" and "controls a complex organization such as the modern hospital."

The history of the modern hospital demonstrates that as hospitals had developed in significance, and as physicians came to realize the benefits of hospital appointments, physicians became increasingly interested in having greater control over hospitals. Thus, the professional medical associations sought ways to tighten their

control on the medical organization of hospitals. In 1919, the American College of Surgeons launched a program directed at standardizing hospital operations, particularly ensuring that qualified anesthetists, satisfactory laboratory equipment, adequate radiological services and adequate clinical records were available (Starr, 1982; Agnew, 1974). Such standardization was critical to the College's goal of admitting to membership only surgeons of proven ability. Without accurate medical records and adequate facilities, assessing suitable candidates was difficult (Weeks and Berman, 1985). Starr suggests that through this mechanism of accreditation, hospitals became the instruments of professional power for physicians.

For a number of years, many Canadian hospitals were accredited through the American College of Surgeons program, which eventually expanded to become the Joint Commission on the Accreditation of Hospitals (JCHA). In 1959, two years after the federal government introduced the Hospital Insurance and Diagnostic Services Act to provide funds for operating hospitals, the Canadian Council on Hospital Accreditation was established, made up of the Royal College of Physicians, the Canadian Medical Association, and l'Association des Medecins de Langue Francaise du Canada (Agnew, 1974). Thus, the hospital as an institution, and the administrator as the agent of its governing board, became increasingly dependent on the profession of medicine.

Larson (1977) suggests that if an aspiring profession is linked to a more powerful and prestigious profession, the group aspiring

towards professionalism will likely be secure as a recognized occupational entity, but will continue to be in a dependent position. Starr (1982) points out that as the influence of the medical profession has constantly expanded, so too the hospital administrator has become more prestigious. However, the pre-existing power structure in health care, in which physicians remain dominant, continues to pose a significant barrier to greater professional development of hospital administrators (Wilensky, 1962; Wilensky, 1964).

A third reality affecting power relations is the substantial role of government in the provision of hospital services in Canada. The nature of hospital funding arrangements obligates hospital administrators to meet government standards, be responsive to government policies and be amenable to government consultation and directives. While the majority of hospital administrators are not civil servants, the degree of autonomy of hospital boards is questionable. This means that most administrators are servants of boards which themselves may be acting as servants of government.

The actual status of the publicly funded hospitals vis a vis the degree of government control of those hospitals is currently being assessed as this status pertains to the recent Canadian Charter of Rights and Freedoms. At least one lawyer claims that a strong argument can be made that the hospital can be considered "a government actor because it is inextricably bound up with government funds, government direction and government power" (Methuen, 1987). Because of this dependent relationship on government, hospital

administrators are caught in the position of implementing policies defined by others and essentially working at the behest of politicians. In fact, hospital administrators can easily become the scapegoats for political decisions as politicians attempt to turn political problems into administrative problems. Nowhere is this vulnerable position of the hospital administrator as evident as in recent government cutbacks to health care funding. Across the provinces, many Canadian politicians have attempted to justify cost-cutting measures by blaming hospital administrators for inefficiency in hospital operations. Clearly, hospital administrators' ability to influence health care policy can be severely contrained by this dependency on government. Further, their limited autonomy makes them increasingly susceptible to a pattern of simply responding to political demands.

Fifteen years ago, Alford (1972:xiv) discussed the "deeply embedded structural interests for control of key health care resources and institutions" (p.xiv). He included hospital administrators in the group of corporate rationalizers, who attempt to rationalize the use of health resources through better integration and coordination of health services. He pointed out that because of conflict with powerful interest groups, particularly medical monopolists, only incremental changes are possible. While the need for rationalization of health services is ever more pressing, it will be difficult if not impossible for the majority of hospital administrators to take a more dominant leadership role in health care.

VII. Affinity with the Dominant Ideology

A final condition suggested by Larson (1977:48) is the profession's affinity with society's dominant ideology. She maintains that the "more a profession's particular ideology coincides with the dominant ideological structures, the more favorable the situation is for the profession ".

The ascendancy of science and technology have been dominating influences in Canadian society for the past decades. Medical science, which has spawned the development of the modern hospital, is clearly compatible with an ideology which defines scientific advance as contributing to the augmentation of life. In fact, medicine and medical science have been accepted as a way of remedying personal and social problems (Cluff, 1984). Because the hospital has been an instrumental part of scientific rationalism, those who administer hospitals become closely aligned with the dominant ideologies.

> The chief executive probably must conform to the values of those who are 'significant' to him either in terms of granting or withholding personal rewards or in being instrumental in aiding or blocking the decision process.... Hence, the health service administrator would be expected to adopt the values of the power elites with whom he works, in and outside the organization (Allison, Dowling and Munson, 1975:173).

Habermas (1970) labelled Western society's orientation to science, and towards manipulating the objective world to allow humankind to acquire increasingly greater control over nature, as a pre-occupation with 'technical rationality'. He emphasized the need to balance this 'technical rationality' with a 'practical rationality' which would focus more attention on the quality of

interactions in the social world. In other words, he suggested the need for greater attention to normative orientations and meaningful social relationships. These same concerns are mirrored in the literature related to the delivery of health services in general, and the management of hospitals in particular. Technological imperatives have often dominated the orientations of health care professionals and other hospital employees to the detriment of more personalized relationships and more humanized values.

The Code of Ethics for health executives in Canada imposes on hospital administrators a "broad responsibility for the total health and well being of the community served" (CCHSE, 1979). However, for hospital administrators to lean too solidly towards initiating collaborative efforts to better serve the community at the expense of not acquiring the newest medical technologies to enhance the image of their institution, would be a move away from the prevailing dominant ideologies and would likely involve significant risk-taking.

CHAPTER SUMMARY AND CONCLUSIONS

In this chapter, aspects of the sociopolitical history of the development of the occupation of hospital administration in Canada have been outlined and discussed. Based on this analysis, it is evident that several resources have been available to members of this occupational group to facilitate their growth and development. These include their linkage to the hospital, one of the central institutions in Western society; their relatively uncontested access

to hospital administration positions; and their affinity with the dominant public ideologies by their association with medicine.

But there are some significant barriers to the increasing professionalism of hospital administration. Among these are the restrictions imposed on hospital administrators by their limited authority and their diffuse accountability, which is a function of the multiplicity of clientele they serve. Barriers also exist due to the ambiguous and ill-defined cognitive base of the practice of hospital administration. Given that a distinctive cognitive base should form the basis to legitimate professional authority, the hospital administrator's knowledge base which is broad, general and familiar cannot provide such legitimation. When one adds to these problems the lack of a standardized training program, it becomes clear that the potential for hospital administrators to develop as a professional community is impeded.

Undoubtedly, a most significant barrier is imposed by the relatively powerless position of hospital administrators in health care. This powerlessness occurs because hospital administrators manage one of the most complex of organizations financed by public funds. Thus, this organization is dependent on government externally and medical staff internally. Because hospitals have been held increasingly responsible both legally and morally for the quality of care provided by the medical staff, hospital administrators, who lack a formal base of power, must often resort to manipulative strategies to gain some control. For these reasons, hospital administrators are

seriously limited in the professional leadership they can take in putting system interests ahead of organizational interests.

> The physician can put the patient's interest ahead of the hospital's because only physicians can legally practice medicine and every physician has a medical staff and a profession to back his claims to autonomy. The administrator has no legal protection and no professional group capable of successfully backing him. Consequently, he lacks the base of power necessary to be socially responsible. It is this deficiency that above all defeats the claims of chief executives to professional status (Allison et al., 1975: 172).

In the final analysis, do hospital administrator's adequately manifest the key structural attributes of a profession? By a mere tally of certain structural attributes in place, such as being a full time occupation, having a professional association, possessing a code of ethics and having some university programs available, one would be inclined to argue that hospital administration in Canada in the 'eighties is a profession. However, it is apparent from the analysis in this chapter that there are structural features of a somewhat different kind which may stand as barriers to professionalism. This suggests that the institutional supports (professional association, code of ethics, university programs, etc.) rather than being the hallmarks of being professionalized, may be imitations of professionalism.

> ...these supports are features that occupations which aspire to the privileges of professional status can imitate, without possessing the cognitive and normative justifications of real professions (Larson, 1977:x).

This is not to suggest that these supports serve no valuable purpose,

but rather to caution that they do not automatically imply that hospital administrators have attained or will attain a professional status as defined by the professional model.

Having assessed the structural attributes of professionalism of hospital administration, it is important to turn to an examination of the attitudes manifested by this occupational group (Hall, 1968). Given the structural limits to their professionalism, do hospital administrators primarily manifest a professional role identity, or an organizational role identity, or some facets of both? And what factors of educational background and work experience might correlate with these attitudinal attributes?

It is the objective of the study, reported in the following chapters, to investigate the degree to which hospital administrators manifest a role identity consistent with the attitudinal attributes of a profession, and to determine the extent to which level of education and length of work experience influence these attitudes.

FOOTNOTES TO CHAPTER 2

1. This move was taken by MacKenzie King to salvage what he could of the comprehensive plan for health insurance drafted in the Marsh and Heagerty Reports of 1943 (see Taylor, 1978) and followed a similar program of hospital construction grants implemented in the United States in 1946, commonly referred to as the Hill-Burton Act.

2. The Province of Saskatchewan implemented the first universal, compulsory hospital insurance program in North America in 1946-1947.

3. Critics often speculate that if a medical insurance program had been implemented in advance of the hospital construction and operating grants programs, primary care might now have a stronger focus in the Canadian health care system.

4. In describing the Canadian College of Health Service Executives as the professional body for hospital administrators in Canada a distinction is drawn between a personal membership (occupational) association and an institutional membership (organizational) association such as the Canadian Hospital Association. An institutional membership association, specifically the Canadian Hospital Association, includes both administrators and hospital trustees. While it is recognized that the American College of Healthcare Executives also serves as a professional body for many hospital administrators in Canada, the Canadian College of Health Service Executives is clearly the Canadian professional association for health care executives, including hospital administrators.

5. The W.K. Kellogg Foundation has played a major role in the education of hospital administrators, particularly in its promotion of the development of graduate programs in hospital administration, beginning a number of programs in North America in 1946 including the University of Toronto program, and continuing the development of new programs in Canada into the late 1970's (Weeks and Berman, 1985).

6. This attempt followed the short-lived organization called the Ontario Hospital Association which was formed in 1902. This association met twice only, the last time in 1904 (Agnew, 1974).

7. The oldest existing hospital association in Canada is the British Columbia Hospitals' Association which began in 1917 with Dr. Malcolm MacEachern as president.

8. The apparent change of attitude regarding deference to the American College seems to have been linked to the ACHA's move to restrict its admission standard to admitting individuals who have a minimum of baccalaureate education, thus rejecting the HOM graduates for admission and denying College membership to a substantial number of Canadian hospital administrators.

9. In addition to serving a standard-setting function, the credentialling of an occupational group, through e.g. certification, also serves the function of enhancing the occupational status, prestige, salary, etc. It is, therefore, a common strategy used by occupational groups to enhance their position.

CHAPTER 3

METHODOLOGY

As stated in the previous chapters, the purpose of this study is to investigate the relative influence of education and work experience in developing and maintaining an occupational or professional role identity; and to assess the degree of compatibility between a professional role identity and an organizational role identity. In selecting hospital administrators as the occupational group of study, the investigator also hopes to contribute some data and insights about the attitudes, values and self-concepts of this type of organizational professional.

THEORETICAL FRAMEWORK

This research is based on role theory, specifically the role-identity model developed by McCall and Simmons (1978). The role identity model is one attempt to synthesize structuralist and interactionist approaches to role theory. McCall and Simmons define role identity as

> the character and the role that an individual devises for himself as an occupant of a particular position,...his imaginative view as he likes to think of himself being and acting as an occupant of that position (p.65).

They suggest that each individual has many role identities, essentially an identity for each social position the individual occupies. Thus an individual would have a role identity specific to

his or her occupational role. The literature suggests that occupational role identity is a function of education, work experience or both education and work experience (Brim, 1966; Kerr et al., 1977; Bucher and Stelling, 1977; Miller and Wagner, 1971; Steers, 1977; Hrebeniak and Alutto, 1972; Angle and Perry, 1983).

DESCRIPTION OF INDEPENDENT AND DEPENDENT VARIABLE MEASURES

Independent Variables

The independent variables, for purposes of this study, fall into two categories: education variables and work variables. Education is defined as a program of formal study which an individual has undertaken, culminating in a certificate, diploma or degree. For purposes of this research, education as an independent variable is measured by total months of study, and by length of study (total months) in each of four main areas: health services administration studies, business education studies, other health occupation studies, and general education (to include all other programs of study).

Work experience is defined as the work history of an individual including length of employment and types of positions held. For purposes of this study, work experience as an independent variable is measured by years employed by the hospital, years employed in health care, number of organizations for which the individual has worked, and number of years in present position.

Dependent Variables

The dependent variable, occupational role identity, is a multi-dimensional concept[1] including both professional and organizational role dimensions. Occupational role identity is, therefore, studied by measuring the individual's self conceptions of his or her major referrent group, sense of calling, feeling of autonomy, sense of public service, belief in self-regulation and proactive position (all considered professional role dimensions); and organizational commitment, reactive position and organizational immobility (aspects of the organizational role dimensions). (See Figure 3-1 for a more specific description of these role dimensions.)

HYPOTHESES

Based on the literature reviewed in chapter one, several hypotheses are derived relative to the development and maintenance of an occupational role identity. Length of formal education and professional role identity are hypothesized to be positively related since a greater number of months of education allows for increased exposure to values, attitudes and self-concepts of being a professional (Brim, 1966). By the same token a longer period of education would decrease an organizational role identity. Length of work experience and an organizational role identity are hypothesized to be positively related because a greater number of years in an organization allows increased time for the goals of the organization and those of the individual to become integrated and congruent (Hall et al., 1970). At the same time, increased length of time in an

FIGURE 3-1

DIMENSIONS OF AN OCCUPATIONAL ROLE IDENTITY

PROFESSIONAL ROLE IDENTITY DIMENSIONS

Use Of Professional Organization As A Major Referrent

Involves both the formal organization and informal colleague groups as the major source of ideas and judgments for the professional in his work (Hall, 1968).

Belief In Service To The Public

Includes the idea of indispensibility of the profession and the view that the work performed benefits both the public and the practitioner. According to Greenwood, a higher degree of professionalism is associated with the belief of the group that the service it renders to society is for the good of the whole, and that withdrawal of service would cause immeasureable harm (Greenwood, 1957; Hall, 1968).

Belief In Self-Regulation

Involves the belief that the person best qualified to judge the work of a professional is a fellow professional, and the view that such a practice is desirable and practical. It constitutes a belief in colleague control (Hall, 1968).

Sense Of Calling To The Field

Reflects the dedication of the professional to his work and the feeling that he would probably want to do the work even if fewer extrinsic rewards were available (Hall, 1968).

Autonomy

Involves the feeling that the practitioner ought to be able to make his or her own decisions without external pressures from clients, those who are not members of his profession, or from his employing organization (Hall, 1968).

FIGURE 3-1 (Continued)

DIMENSIONS OF AN OCCUPATIONAL ROLE IDENTITY

PROFESSIONAL ROLE IDENTITY DIMENSIONS

Proactive Position

Involves the inclination to anticipate events, to take leadership and initiative and to be involved in policy formulation and political action within and without the institution.

ORGANIZATIONAL ROLE IDENTITY DIMENSIONS

Organizational Commitment

Involves a strong belief in and acceptance of the organization's goals and values, and a willingness to exert considerable effort on behalf of the organization (Mowday and Steers, 1979).

Organizational Immobility

Involves the desire to remain with an organization because a series of investments have served to constrain movement to another organization. It is based on Becker's (1960) theory of side-bets, where time invested in an organization becomes a valuable resource in an exchange relationship for such realities as, e.g., pension plans, seniority, alternative opportunities foregone, etc. (The term itself is derived from Tuma and Grimes, 1981).

Reactive Position

Involves the inclination to rely on direction and to see one's role as responding to events rather than anticipating events and taking action in advance.

organization is hypothesized to lead to a decrease in professional role identity, and may even reduce the effect of formal education on a professional role identity, because intellectuals working in organizations gradually accommodate their social values and specal knowledge to the needs of the organization (Merton, 1957a). Finaly, it is hypothesized that an organizational role identity and a professional role identity are negatively related since the potental for conflict between professional values and organizational values is ever present. Thus, it is hypothesized that:

1. Length of education is positively related to a professional role identity.
2. Length of education is negatively related to an organizational role identity.
3. Increased work experience is positively related to an organizational role identity.
4. Increased work experience is negatively related to a professional role identity.
5. Increased work experience reduces the effect of education on a professional role identity.
6. Organizational role identity and professional role identity are negatively related.

POPULATION/SUBJECTS

According to role theory, each position within a culture has associated with it a set of expectations and norms which specify appropriate behaviors for the occupant of that position. The concept

of role is related to these expectations and behaviors, although at least three different conceptualizations of roles exist. First, there is the concept of role as a system of expectations regarding behavior (the prescribed role); second, there is the concept of role as specific expectations the occupant of a position perceives as applicable to his or her behavior (the subjective role); and third, there is the concept of role as specific overt behaviors of an occupant of a position (the enacted role) (Deutsch and Kraus, 1965). All three conceptualizations share the perspective that the expectations of others with whom the occupant of a position interacts will shape the role, the role perception (subjective role identity) and the role behavior. In studying a particular role, such as an occupational role identity, therefore, it is important to be cognizant of the network of role relationships in which the particular role is embedded because the expectations of the occupants of roles in this network will help to shape the role perception, or the personal role identity, of the role occupant.

The subjects selected for this study of the occupational role identity of hospital administrators were chief executive officers of the hospital organization. Restricting the population in this manner not only avoids confusion of titles and positions at the second and third levels of administration but ensures a comparable network of role relationships (for example, relationships with their hospital's trustees, chief physicians, chief nurses, department heads, key government officials, etc.) which will influence role perceptions (Hanson, 1961; Schulz and Johnson, 1983). In order to control for

role activities which are outside of senior executive duties (such as care of patients, bookkeeping, etc.), it was decided to restrict the study to administrators of institutions with at least 100 beds, since hospital administrators in smaller institutions may spend some of their work-day on tasks of a non-administrative nature.

In short, the total population of chief executive officers (the senior or top executives in the hospital, called variously president, executive director or administrator) in English language hospitals of 100 beds or over in Canada, as listed in the Canadian Hospital Directory, constituted the research subjects for this study (N=361). Restricting the study to administrators in English language hospitals in Canada controls for potentially confounding factors, e.g., access to different professional journals and other health care and administrative literature, differing availability of regional and national educational conferences, etc.. Further, it avoids errors of misinterpretation of data which may occur in translation.

Hospitals listed in the Canadian Hospital Directory include those which provide acute, pediatric, psychiatric, maternity, chronic, convalescent, rehabilitative and extended care; as well as care for mentally retarded and forensic patients. Although the Directory is regarded as a reasonable sampling frame, some inconsistencies in listings occur across provinces, often influenced by the particular government ministry under which certain facilities operate (for example, residential care for the mentally retarded may all be listed in some provinces and only partially listed in others). In addition, there is some variation in inclusion of extended care facilities by

province because of the way in which different provinces categorize auxiliary hospitals, nursing homes, etc. One other confounding factor is in the way multi-institutional facilities are listed. These are facilities which are governed by a single board and usually by a single administration, but include a number of separate institutions, sometimes geographically quite separate. In many cases only the executive director of the multi-institutional complex is listed for each separate institution; in other cases each site administrator is listed separately for the institution in the complex. A decision was taken to survey all those listed as chief executive officers, even though these inconsistencies were recognized. In all of these cases, a decision was made to abide by the Canadian Hospital Directory listing since a decision to exclude, for example, administrators of individual institutions apparently in a multi-institutional arrangement would have pre-judged the type of administrative arrangement. Likewise, exclusion of nursing homes or residential settings for the mentally retarded would likely have created a different set of inconsistencies since many of these are linked to other types of care such as extended care arrangements which should be included. In short, it was felt that any attempt to refine the Canadian Hospital Directory Listing would add at least as many errors as it eliminated.

It is recognized that limiting the study to the top level administrators in Canadian hospitals of 100 beds and over in English language hospitals excludes a sizeable number of hospital administrators in Canada, particularly those in small hospitals, in

lower level administrative positions in medium and large hospitals and in French language hospitals. Thus, one must not assume that the findings of this study are generalizable to administrators beyond chief executive officers nor to CEOs in Canadian hospitals under 100 beds.

DATA COLLECTION PROCEDURES AND RESPONSE RATE

Data were collected during the period of January 1, 1987 to April 15, 1987. Questionnaires (see Appendix A) were mailed to all the 361 hospital chief executive officers listed in the Canadian Hospital Directory with a covering letter explaining the study and guaranteeing confidentiality (see Appendix B). Each mailing included a stamped, self addressed return envelope which had been assigned a code number. When the completed questionnaire was received in the Department of Sociology, the receptionist opened the envelope and separated the questionnaire from the numbered envelope to protect the anonymity of the respondents. The investigator then picked up several days' accumulation of questionnaires separately from the accumulated envelopes. Thus, it was possible to determine which CEOs had responded (for purposes of follow-up), but it was not possible to link any one CEO to a particular questionnaire.

In four weeks time 159 responses were received (a 44% response rate) and a follow-up letter was sent to non-respondents (see Appendix B). During the next four weeks, an additional 44 responses were received (a 12% increase) making a total response rate of 56% (204 responses).

A second follow-up letter (see Appendix B) with another questionnaire and a return envelope was sent to non-respondents at the end of this second four week period. This follow-up raised the total response rate to 70% with the total responses received numbering 253, and the total useable questionnaires numbering 234 (64.8%).

Given that two CEOs disqualified themselves from the study because a more senior executive had already answered for that institution (in a multi-institution facility), and that notification was received that eight CEOs had vacated their positions, a revised population base of 351 indicates a response rate of 72.1% with a 66.7% useable rate.

Comparision of Respondents and Non-Respondents

With the exception of three respondents who chose not to identify the province in which they were located, comparisons of respondents and non-respondents could be calculated by province and by hospital rated bed size by consulting the Canadian Hospital Directory. In addition, by using membership lists available from the Canadian College of Health Service Executives it was possible to estimate membership in CCHSE and the education of non-respondent CCHSE members.

As indicated in Table 3-1, the response rate across the provinces varied from lows of 60.0% in Newfoundland and 61.9% in Ontario to highs of 94.1% in Saskatchewan and 100% in Prince Edward Island, with an average provincial response rate of 74.9%. One can conclude,

TABLE 3-1

NUMBER OF RESPONDENTS
BY
PROVINCE

	PROVINCE				
	B.C.	ALTA.	SASK.	MAN.	ONT.
TOTAL NUMBER SURVEYED	57	43	17	17	163
RESPONDENTS	45(78.9)	32(74.4)	16(94.1)	12(70.5)	101(61.9)
USEABLE	43(75.4)	28(65.1)	15(88.2)	11(64.7)	90(55.2)

	PROVINCE				
	QUE	N.B.	N.S.	P.E.I.	NFLD.
TOTAL NUMBER SURVEYED	20	10	20	3	10
RESPONDENTS	14(70.0)	7(70.0)	14(70.0)	3(100.0)	6(60.0)
USEABLE	14(70.0)	7(70.0)	13(65.0)	3(100.0)	6(60.0)

therefore, that all provinces were adequately represented, although the useable response rate from Ontario dipped to 55.2%.

When respondents and non-respondents were compared according to rated bed size of their respective facilities, there was a proportionately equal representation of respondents from three of the four size categories of hospitals with a slightly higher representation of hospitals in the 500-749 category (see Table 3-2).

Of those who responded, 202 individuals, or 86.3% of respondents, were members of the Canadian College of Health Service Executives. By using the numbers on the returned envelopes to check off respondents names and addresses on the survey subject list, and by comparing this list to the list of Canadian College of Health Service Executive members (purchased by the researcher from the College), it was determined that an estimated 44 (40.4%) of non-respondents were CCHSE members and 65 (59.6%) were not CCHSE members. Thus, CCHSE members are likely over-represented in the respondent group. In addition, through this comparative process, it was determined that, based on non-respondent CCHSE members only, the education level of non-respondents was comparable to that of respondents.

In summary, except for the potential difference in CCHSE membership, respondents were similar to non-respondents. Therefore, there is reason to believe that the survey results present a reliable portrait of responses of CEOs in Canadian hospitals regarding their occupational role identity.

TABLE 3-2

COMPARISON OF RESPONDENTS
BY
RATED BED SIZE OF FACILITY

RATED BED SIZE	TOTAL CEOs	RESPONDENTS (USEABLE QUESTIONNAIRES)
100-249	170	107 (62.9%)
250-499	119	72 (60.5%)
500-749	45	35 (77.8%)
750 PLUS	27	18 (66.7%)
NO RESPONSE		2
TOTAL	361	234 (64.8%)

TEST INSTRUMENT

Design and Measurement

To measure values and attitudes related to an occupational role identity, two existing scales were adapted for hospital administrators and some new scale items were developed. To measure attitudes related to professional role identity, items were selected from Hall's Occupational/Professional Inventory Scale. This scale refined by Snizek (1972) in a study of engineers and scientists, has been utilized to study occupational therapists (Bell and Bell, 1975), nurses and physicians (Monning, 1978; Donner, 1986) and computer specialists (Bartol, 1979). This instrument has demonstrated an overall reliablity of .76-.80 using the Kuder-Richardson formula (Snizek, 1972) and .72 using the Spearman-Brown split halves method (Donner, 1983). The scale includes five dimensions: use of the professional organization as a major referrent, belief in public service, belief in self regulation, a sense of calling, and a sense of autonomy (Hall, 1968). On the scale refined by Snizek (1972), subjects respond to five questions from each dimension on a five-point Likert-type scale. For the test instrument developed for this study, three items from each of the five dimensions were selected and adapted and a seven-point Likert-type scale was employed. The three items were selected for their suitability for hospital administrators on the basis of literature reviewed, the investigator's subjective judgment and pre-test responses. In addition, three items were developed by the investigator to measure proactive position.

To measure attitudes related to organizational role identity, two items from the 15 item Organizational Commitment Questionnaire (Mowday and Steers, 1979) were selected to measure organizational commitment. Individual items designed to measure organizational immobility were also derived from a number of other scales (Aram, 1971; Forsyth and Danisiewicz, 1985; Angle and Perry, 1983; Dion, 1985), and several items related to reactive role perceptions were developed by the investigator. In each case, three items were selected or developed to assess each of these three dimensions of organizational role identity.

The Questionnaire was structured into six sections: work experience and occupational associations, educational attainments and activities, perceived role of the hospital chief executive officer, attitudes related to occupational role identity (professional role dimensions and organizational role dimensions), administrative dilemmas (situations posing a problem) and personal information (See Appendix A). In the first section, CEOs were asked to provide information by filling in blanks or checking off categories relative to years in health care, type of hospital, etc. and to list their present position and their four previous positions held. They also were asked to list occupational associations in which they had a personal membership. In the section which then followed, CEOs were asked to list their educational qualifications, including year of completion of their educational program and number of years of study. In addition, they were asked to check off answers relative to continuing education activities.

Section three consisted of a series of open-ended questions about the individual's conception of his or her major role responsibilities, major problems of being a hospital CEO, most important knowledge required by a hospital CEO and the best type of preparation for a career in hospital administration. These questions were designed to tap the concept of professional identity described by Bucher and Stelling (1977) as

> a definition of the nature of the field - its boundaries, the problems with which it is concerned, and its basic tools and method (p.27).

Two open-ended questions about reasons for entering a career in hospital administration and changing expectations regarding the career were designed to complement attitude questions on sense of calling. The final set of open-ended questions was designed to elicit information about significant others, since the literature indicates that these persons are influential in establishing the perceptions an individual has in relation to role and role expectations.

Section four consisted of the 27 attitude scale items relative to occupational role identity, and section five consisted of three administrative dilemmas. These three dilemmas consisted of a description of a problem situation a hospital CEO might encounter in discharging his or her duties. The CEOs were asked to suggest the course of action they would take and to provide reason(s) for that choice of action. These dilemmas were designed as an alternative approach to measuring professional and organizational role

identities. In all three administrative dilemmas presented, a range of organizationally oriented responses and professionally oriented responses were possible.

The final short section entailed questions about age, gender, marital status and dependent children, all designed to identify additional potential correlates of attitudes related to organizational immobility, and to measure the effect of age and sex on professional and organizational role identities.

ASSESSING RELIABILITY AND VALIDITY

Content Validity: The Pre-Test

The questionnaire was pre-tested to determine the adequacy with which the measures assessed the relevant theoretical constructs (content validity). Following the guidelines suggested by Woodward and Chambers (1983), three types of groups were involved in scrutinizing the questionnaire during pre-testing. First, the questionnaire was reviewed by three University of Alberta faculty members and two doctoral students in the Department of Sociology, and by two faculty in the Department of Health Services Administration and Community Medicine. As a second step in the pre-test, three Vice Presidents of the Canadian Hospital Association and two Vice Presidents of the Canadian College of Health Service Executives completed the questionnaire and were interviewed following completion. These latter two groups of vice president respondents represented the group Woodward and Chambers (1983) call potential users, i.e. individuals who are knowledgeable about the topic being

studied and are likely to make use of the results. Finally, the questionnaire was pre-tested on nine individuals in the Edmonton area and two individuals from outside Alberta. Since the study population included all CEOs of English language hospitals over 100 beds in Canada, none of the current CEOs could be selected for pre-test purpose. Therefore, the group of eleven included three recently retired hospital CEOs, one hospital CEO not listed in the CHA Directory, and seven Vice-Presidents or Associate Executive Directors of hospitals. In each case the questionnaire was delivered to the pre-test subject several days in advance of an appointment being set for interview to discuss the completed questionnaire. Discussion focused on a Pre-Test Question Schedule (see Appendix C) which involved assessing technical aspects of the questionnaire (e.g., clarity, time requirement, logical ordering) as well as matters of substance (e.g., coverage of relevant topics, adequate coverage of important aspects of education and work experience). Based on comments and criticisms received from these individuals, further minor modifications were made to the questionnaire. Thus, to the extent that it is possible to establish content validity (Carmines and Zeller, 1979) attempts were made to determine the adequacy with which the measures assessed relevant theoretical constructs.

Construct Validity: Factor Analysis

Because occupational role identity is a multidimensional construct, a multivariate approach is required in order to identify and investigate key dimensions. In order to empirically test the

construct validity of the nine sub-scales designed to measure the dimensions of occupational role identity, an exploratory factor analysis was employed. Factor analysis is a statistical technique for "determining the number and nature of the underlying variables among larger numbers of measures" (Kerlinger, 1973:659). It has the parsimonious effect of locating and identifying fundamental properties underlying measures. "The goal of factor analysis is to identify the not-directly-observable factors based on a set of observable variables" (Norusis, 1985:126).

A factor is, therefore, a hypothetical entity in the form of an unobservable or latent variable assumed to be a linear function of observed variables, or, in this instance, role identity scale items. The loading of an item on a particular factor is a measure of the extent to which a given factor is present in that item. Factor loadings can reach a maximum of 1.0, and loadings of less than .30 are usually considered unimportant (Crocker and Algina, 1986). If an item measures one trait only, it is said to be factorially pure. A successful factor analysis a) explains relationships of the variable set with as few factors as possible, and b) provides meaningful or interpretable factors.

An initial step in factor analysis involves factor extraction. In this analysis, estimates of initial factors are obtained from principle component analysis which involves the formation of linear combinations of the observed variables. This extraction provides a set of eigenvalues which indicate the total variance explained by each factor. Although there are some controversies related to how

one determines the number of factors, commonly accepted practice is to retain those factors associated with eigenvalues greater than 1.0 (Hakstian and Bay, 1972; Crocker and Algina, 1986). Based on the number of eigenvalues over 1.0, a factorial solution with nine factors was found to represent the multivariate dimensionality of the instrument, explaining 60.7% of the variance.

Following the initial factor extraction, the technique of rotation is employed to transform factors to render them more interpretable by minimizing the number of variables that have high loadings on a factor. Rotation is a geometric interpretation of factor analysis which involves changing the location of the axes while preserving interrelationships among factors. Thus, different factor loadings may result depending on the rotations performed. The two classes of rotations commonly employed are orthogonal rotation and oblique rotation. In an orthogonal solution the new axes are perpendicular to one another; in an oblique solution the new axes are not perpendicular. Although there are many methods available, the author chose the commonly used methods of varimax rotation for the orthogonal solution and oblimen rotation for the oblique solution. Only factor loadings of at least plus or minus .40 were considered in this interpretation.

Using the varimax rotation, the nine factors yielded relatively clearly defined functional groupings of the questionnaire items. (See Table 3-3. All loadings greater than .40 are highlighted). Factor 1 contained high loadings (over .75) on the items: being able to judge the competence of other CEOs, having a good idea of the competence of

TABLE 3-3

FACTORIAL ANALYSIS OF 27 OCCUPATIONAL ROLE IDENTITY ITEMS

ORTHOGONAL ROTATION (VARIMAX)
(Loadings of .40 or greater are emphasized)

	FACTORS								
ITEM	I	II	III	IV	V	VI	VII	VIII	IX
15	-.10	.31	.24	.09	-.25	.46	-.25	-.05	.13
16	.02	-.02	-.06	.04	.05	.81	.01	.09	-.35
17	.17	.05	-.15	.21	.27	.45	.32	.17	.20
18	-.16	.11	.31	-.16	.02	.24	-.23	.59	-.16
19.	.05	-.29	.08	-.13	-.19	-.14	.38	.17	.38
20	.11	.01	.05	.17	.02	-.11	.21	.68	.07
21	.76	.16	.03	.09	.09	-.01	.12	.12	-.01
22	-.05	.59	-.18	.02	-.01	.13	.05	-.09	-.23
23	.09	.25	.22	.17	.27	.09	.57	.22	.15
24.	.16	.45	.09	-.18	-.38	.32	.12	-.12	-.07
25	-.02	-.02	.06	.16	.33	.18	-.08	-.15	.72
26	.04	-.01	.22	.07	-.05	.04	.75	.04	-.19
27.	.04	.01	.77	.10	.08	.01	.17	.22	.01
28	.31	-.15	.16	.14	.15	.12	.22	.53	.01
29	.19	-.29	.19	.63	.08	.09	.06	.14	.13
30	.25	-.01	.15	.54	.09	-.07	.24	.16	.08
31	-.11	.79	.14	-.11	.12	-.02	-.05	.10	.01
32	.01	-.31	.05	-.12	.07	.43	.18	-.33	.34
33	.83	-.01	.10	.13	-.12	.07	.07	.07	.02
34	.04	.03	.82	.16	-.01	-.03	.14	.03	-.01
35.	.09	-.12	-.29	-.14	-.02	-.38	-.21	.24	.51
36	.17	.02	.39	.58	.35	.03	.17	.07	.12
37	.01	-.04	.21	-.01	.71	-.04	.10	-.05	.08
38	.17	-.01	-.09	.05	.62	.10	-.05	.14	.07
39	.19	.56	.10	.19	-.29	-.24	.07	.05	.12
40	.75	-.20	-.06	-.04	.22	-.01	-.07	-.05	-.04
41	-.18	.18	-.03	.70	-.15	.09	-.11	-.06	-.22
EIGEN-VALUE	4.22	2.59	1.84	1.78	1.40	1.32	1.16	1.05	1.03
PERCENT OF VARIANCE EXPLAINED	15.6	9.6	6.8	6.6	5.2	4.9	4.3	3.9	3.8

other CEOs, and having a sense that other CEOs know how well one performs one's work. This factor corresponded to Hall's (1968) theoretical contruct of Belief in Self Regulation.

Factor 2 contained loadings (.45 to .78) on items relative to remaining in one's present position for personal reasons, attaching importance to stability of employment, believing that one should confine one's attention to implementing policies defined by the hospital board, and believing one can be most effective if the board provides the CEO with clear directives. This factor was a composite of the two previously hypothesized constructs of organizational immobility and reactive position. It was called Organizational Loyalty since it includes both a desire to remain with the organization because of personal investments and a desire to carry out organizational directives.

Factor 3 had high loadings (over .77) on two items which included the opinion that health care administrators are essential to society, and that the functioning of the system would be seriously impaired by the absence of health administrators. These items corresponded to the hypothesized Belief in Service to the Public construct.

Factor 4 contained four loadings of significant size: that the CEO has a key role to play in initiating change, that the CEO should be actively involved in developing health care policy, and that the CEO should be responsible for keeping service to the public the foremost goal of the hospital. An additional item loading on this factor was that the CEO routinely reads major health/hospital administration journals. There seemed little question that this

factor represented the Proactive Position construct since three of the four items conformed to that theoretical construct, and the additional item of reading the major journals makes sense for one who sees his/her role as being proactive.

Factor 5 contained two items of relatively high loading. One included the belief that one's knowledge and skills are easily transferable to another institution, and the other indicated basic agreement with the board's policies. This factor seemed to represent a type of Organizational Commitment.

Factor 6 had one high loading (.81) on the item of making one's own decisions in regard to what is to be done in one's work, and three loadings of significant size (over .42) on items of feeling one's main responsibility is to stay within the budget, finding that one's own values and those implicit in the policies of the institution are similar, and feeling a sense of autonomy in one's work. This factor was a combination of the constructs of autonomy (2 items), commitment, and reactive position and was called Circumscribed Autonomy. This construct would be similar to Dalton's (1966) concept of coerced freedom, which is the freedom of the executive to pursue alternatives but within limits defined by his position.

Factor 7 had the largest loadings on items which hold that CEOs have a real sense of dedication to their work and that health administrators maintain a high level of idealism. Factor 7 was identifiable as a Sense of Calling to the Field.

Factor 8 had significantly high loadings on the belief that hospital administrators should have an individual membership in an occupational/professional association, and that people do not realize the essential role hospital administrators fill in society. Factor 8 seemed to represent Use of Professional Organization as a Major Referrent.

Factor 9 contained two items: one which depicted the CEO as having opportunity to excercise his own judgment and the other which suggests that the interests of the hospital do not come before everything else. This factor was identified as Professional Autonomy.

Comparing the varimax solution to the oblimen rotation solution, all factors had identical items with significant loadings with the exception of Circumscribed Autonomy. On this factor an additional item characteristic of autonomy had a factor loading of .40. This same item had a loading of .45 on Professional Autonomy. As both these factors have been identified as types of autonomy, the loading of this variable on both factors seemed reasonable.

Since a goal of a good factor analysis is to discover interpretable factors (i.e., items with a high loading on one factor and near zero loadings with others) which are as independent as possible from other factors, the varimax solution seemed preferable to the oblimen rotation solution.[2] And since the oblique (oblimen) rotation resulted in the same grouping of items as the orthogonal rotation, except for the one exception noted above, the

interpretation of factors did not change based on the oblique rotation solution.

In comparing the theoretical constructs underlying the original sub-scales to those suggested by the factor solution, it was clear that five of the original constructs were supported. These include Use of the Professional Organization as a Major Referrent, Belief in Service to the Public, Belief in Self Regulation, Sense of Calling and Proactive Position. It was equally clear that the construct of Organizational Immobility and Reactive Position could be collapsed into one which represents Organizational Loyalty. Two theoretical constructs (Autonomy and Organizational Commitment) fractured into three separate constructs: one which was called Professional Autonomy, one Circumscribed Autonomy, and the other a re-defined Organizational Commitment (see Table 3-4 and Figure 3-2).

Reliability and Cronbach's Alpha

A number of methods were employed to assure greater reliability. Consistency of answers (reliability) was checked during coding, and consistency of coding was addressed by having only the researcher code the questionnaire responses. Coding of the open-ended questions was established by a study of the first 75 questionnaires to develop as complete a range of options as possible. Open codes were also provided for later additions of possible answers. (See Appendix D for Code Book). After the questionnaires were coded, the researcher re-checked a random 10% of the questionnaires. Only minor discrepancies were noted in the coding of the open-ended questions.

TABLE 3-4

COMPARISON OF HYPOTHESIZED AND FACTOR GENERATED DIMENSIONS OF OCCUPATIONAL ROLE IDENTITY ORTHOGONAL ROTATION (VARIMAX)

	OBSERVED FACTORS								
HYPOTHESIZED FACTORS / ITEMS	I REG	II LOYAL	III BELIEF	IV PROACT	V COMMIT	VI C.AUTO	VII CALL	VIII PROF	IX P.AUTO
REGULATION									
33	.83								
21	.76								
40	.75								
IMMOBILITY									
31		.79							
22		.59							
37		(-.04)			.71				
BELIEF IN SERVICE									
34			.82						
27			.77						
18			(.31)					.59	
PROACTIVE									
41				.70					
36				.58					
29				.63					
COMMITMENT									
38					.62				
35					(.35)				.51
17					(.27)	.45			
AUTONOMY									
16						.81			
32						.43			
25						(.18)			.72
CALLING									
26							.75		
23							.57		
19							(.38)		
PROFESSIONAL REFERRENT									
20								.68	
28								.53	
30				.54				(.16)	
REACTIVE									
15						.46			(.12)
24		.45							(-.06)
39		.56							(.12)

Summary: A nine factor solution explaining 60.7% of variance. Only factor loadings of at least plus or minus .40 were considered in this interpretation.

FIGURE 3-2

ITEMS COMPRISING DIMENSIONS OF OCCUPATIONAL ROLE IDENTITY
(FACTOR GENERATED SCALES WITH RELIABILITIES[1])

FACTOR 1 - BELIEF IN SELF REGULATION (RELIABILITY = .74)

33	My colleagues from other hospitals know pretty well how effective I am in my job.
21	My fellow hospital CEOs have a pretty good idea about each other's competence.
40	It is difficult for me to judge the competence of other hospital CEOs. (R)

FACTOR 2 - ORGANIZATION LOYALTY (RELIABILITY = .57)

31	A very important thing to me at this stage of my life is to have stability of employment.
22	I will likely remain in my present position for some time due to personal circumstances rather than for professional reasons.
39	I can be most effective in my job if the Board provides me with clear directive.
24	I believe it is my job to confine my efforts to implementing policies defined by the Board.

FACTOR 3 - BELIEF IN SERVICE TO PUBLIC (RELIABILITY = .76)

34	The functioning of the health system would be seriously impaired if there were no health care administrators.
27	I think health care administrators as an occupational group are essential to society.

FACTOR 4 - PROACTIVE POSITION (RELIABILITY = .63)

41	I believe it is my responsibility to evolve ways and means of reminding the Board and the Medical Staff that this hospital is here to serve the good of the public.
29	As a hospital CEO I have a key role to play in initiating change in the health care system.
36	As a hospital CEO I should be actively involved in developing health policy.
30	I routinely read the major health/hospital administration journals.

FACTOR 5 - ORGANIZATIONAL COMMITMENT (RELIABILITY = .41)

37	The particular knowledge and skills I have developed in my position would not easily be transferable to another health facility. (R)
38	Often I find it hard to agree with the Board's policies on important matters related to program priorities. (R)

FIGURE 3.2 (Continued)

FACTOR 6 - CIRCUMSCRIBED AUTONOMY (RELIABILITY = .40)

16	I make my own decisions about what is to be done in my work.
15	My main responsibility as a hospital CEO is to stay within the budget of my hospital.
17	I find that my values and the values implicit in the policies of the hospital in which I work are very similar.
32	There is little real autonomy in the work of the hospital CEO.(R)

FACTOR 7 - SENSE OF CALLING (RELIABILITY = .54)

26	It is encouraging to see the high level of idealism which is maintained by most hospital CEO's.
23	Most hospital CEOs have a real sense of dedication for their work.

FACTOR 8 - USE OF PROFESSIONAL ORGANIZATION AS MAJOR REFERRENT (RELIABILITY) = .45)

20	I believe hospital CEOs should have an individual membership in an occupational/professional association of health administrators.
18	People, in general, do not realize the important role that hospital administrators fill in society.
28	I regularly attend meetings of the professional association(s) for health administrators.

FACTOR 9 - PROFESSIONAL AUTONOMY (RELIABILITY = .45)

25	I feel I have little opportunity to exercise my own judgement in my position. (R)
35	I believe it is important to put the interests of the hospital I work for above everything else. (R)

---

[1] Cronbach's alpha

(R) = Reverse Scoring

Cronbach's Alpha was the reliability test selected and applied to the original scales as hypothesized, and to the scales created as a result of the varimax factor solution. Cronbach's alpha is an index of internal consistency which ranges from zero (no internal consistency) to unity (perfect internal consistency). It provides a conservative estimate of a measure's reliability. Generally alphas should be .70 or greater to be considered reliable (Bohrnstedt and Knoke, 1982; Carmines and Zeller, 1979). As depicted in Table 3-5, standardized alpha coefficients on the original scales indicate some problems of reliability, particularly in relation to the Organizational Commitment and the Organizational Immobility scales.

The factor generated scales showed an overall improvement although four scales, Organizational Commitment, Circumscribed Autonomy, Professional Referrent, and Professional Autonomy were still low. These low reliability indexes might be attributed to two main causes. The adaptation of items to administrators may have changed them sufficiently to weaken their reliability, and a reduction of items from five to three may have had the same effect. Comparison with the Hall and Snizek 5 item scales as reported by Snizek (1972) indicates some lower reliabilities on individual dimensions compared to the overall scale reliabilities generally cited.

To deal with the problem of reliability, it was decided to analyze the data using both the factor generated indexes and the questionnaire item which loaded the highest on each factor.[3] (The indexes for each dimension were created by computing the means of the

TABLE 3-5

COMPARISON OF RELIABILITIES (CRONBACH'S ALPHA) OF HYPOTHESIZED SCALES AND FACTOR-GENERATED SCALES

HYPOTHESIZED SCALES (3 ITEMS EACH)	ALPHA	FACTOR DEVELOPED SCALES (2-4 ITEMS EACH)	ALPHA
BELIEF IN SELF-REGULATION	.74	BELIEF IN SELF-REGULATION	.74
ORGANIZATIONAL IMMOBILITY	.37	ORGANIZATIONAL LOYALTY	.57
BELIEF IN SERVICE	.59	BELIEF IN SERVICE	.76
PROACTIVE POSITION	.55	PROACTIVE POSITION	.63
ORGANIZATIONAL COMMITMENT	.25	ORGANIZATIONAL COMMITMENT	.41
AUTONOMY	.44	CIRCUMSCRIBED AUTONOMY	.40
SENSE OF CALLING	.43	SENSE OF CALLING	.54
PROFESSIONAL REFERRENT	.42	PROFESSIONAL REFERRENT	.45
REACTIVE POSITION	.42		
		PROFESSIONAL AUTONOMY	.45

items loading on each factor at at least the plus or minus .40 level). Thus, for example, both the factor index of Belief in Self Regulation and Item 33 (My colleagues from other hospitals know pretty well how effective I am in my job) were employed in subsequent analysis.

METHODS OF ANALYSIS

Following the initial factor analysis, frequency distributions were obtained on each variable to establish that there was heterogeneity across respondents on both independent and dependent variables. Bivariate correlations among the independent variables were then examined in order to identify significant relationships between length of education and length of work experience. Correlation coefficients were also calculated among the dependent variables to assess the relationships between the organizational and professional role identity dimensions.

In order to assess which education and work experience variables, controlling for other variables, were most highly correlated with occupational role identity, the occupational role identity dimension indexes and items were regressed on these independent variables. For this purpose the Likert-type scale data from measurement of the dependent variables were treated as interval data.

Multiple regression is a general statistical technique used to analyze the relationship between a dependent variable and a set of independent variables. As a descriptive tool, multiple regression analysis can be used "...to control for other confounding factors in

order to evaluate the contribution of a specific variable or set of variables" (Kim and Kohut, 1975). For this analysis, the stepwise regression procedure was employed. In this procedure the variable which explains the largest proportion of variance is entered first, and subsequent variables are entered at each step in the order of ability to explain remaining variance. When no remaining variables added a statistically significant amount of explained variance the procedure terminates.

First, the factor generated indexes and each leading item for that factor were regressed on the education variables; then the factor generated indexes and the leading items were regressed on the work experience variables. The variables providing the best explanatory power from each group of independent variables were then combined into a single equation for each index (and each leading item) and the step-wise multiple regression method was again employed. Because these analyses produced rather limited findings, the methods of analyses were later expanded to include statistical methods which might identify non-linear and conditional relationships.

LIMITATIONS

There are a number of limitations inherent in this study. As previously noted, there is likely to be some error in using the Canadian Hospital Association Directory to locate the population for study. There is also the problem of limited generalizability of the findings imposed by chosing to limit the study to top level

administrators in Canadian Hospitals of 100 beds or over in and confining the study to English language hospitals. Limiting the subjects' responses to mailed questionnaires also imposes constraints, chiefly the inability of the investigator to probe for more specific answers, to ensure that all questions are answered and to clarify questions which the subject finds confusing. While low return rates are generally a characteristic of mailed questionnaires, the response rate on this survey at 72% was considered generally acceptable, and non-respondents were shown to be similar to respondents except for membership in CCHSE.

Since it is likely that an occupational role identity is subject to change over time and situation, a cross-sectional study of attitudes also has limitations in examining the process of role-identity formation. For such purposes, a longitudinal study is required.

CHAPTER SUMMARY

In this section, the methodology of the study has been described including the theoretical framework, the operationalization of the variables, the selection of the study population/subjects, data collection and response rate, the test instrument and the methods of data analyses. Included has been a discussion regarding the design of the questionnaire and the various techniques employed for assessing reliability and validity. A brief discussion of the types of methods of analysis and of the limitations of the study has been provided. In the following chapter, the findings of the study are

reported with attention first to describing the demographic characteristics of the respondents, followed by the testing of the hypotheses.

FOOTNOTES TO CHAPTER 3

1. The term 'concept' has been used here as a summary term for the nine dimensions of an occupational role identity. In this sense, the term 'concept' is employed rather loosely, and some readers might prefer use of the term 'model', 'paradigm', 'ideal type' or 'theoretical framework'.

2. It might be argued that the selection of the oblique rotation solution would be preferable to the orthogonal rotation solution since the oblique rotation represents correlated factors. The conceptual scheme of the model of occupational role identity implies positive relationships amongst professional role identity dimensions and amongst organizational role identity dimensions, and negative correlations between professional and organizational role identity dimensions. Thus, an oblique solution would be more in keeping with the conceptual scheme. However, given that both rotations resulted in virtually the same grouping of items, the actual outcomes of the factor analysis in this instance do not differ. In other words, the data would seem to indicate very limited correlation amongst the dimensions.

3. A different decision criteria might have been employed in deciding which particular item loading (.40 or greater) on a factor would be analyzed, such as basing the choice of item on the quality of the item (e.g., content validity, clarity, etc.). This approach would have had the effect of separating the index from the choice of item used more explicitly. However, on the majority of dimensions, the item chosen would have been identical to the highest loading item on the factor.

CHAPTER 4

FINDINGS: TEST OF HYPOTHESES

The purpose of this chapter is to describe and discuss the results of the data analyses for purposes of testing the hypotheses. Characteristics of the respondents will be described, followed by a discussion of relationships among the independent and dependent variables.

CHARACTERISTICS OF THE RESPONDENTS

The 234 respondents are a well-educated group who have considerable experience in health care. Fifty-five percent of respondents hold master's degrees; 38.5% hold a master's degree or equivalent (e.g. a post-graduate Diploma in Hospital Administration from the University of Toronto) specifically in health services administration. Seventy-three percent hold a baccalaureate degree, the most common degree being a Bachelor of Arts, followed by a Bachelor of Commerce. (See Table 4-1). Comparing these findings to the Hastings et al. (1981) study of Canadian health administrators in the late 'seventies, when the correspondence-type course specific to health administration was the most common credential for hospital CEOs (42.2%), there seems to have been a major upward shift in educational preparation for health administration. Roughly 25% hold a health occupation/professional qualification with 12.4% having an R.N. Diploma and 4.3% an M.D.. This is in sharp contrast to the

TABLE 4-1

RESPONDENTS BY TYPE OF EDUCATION
(N = 234)

MASTER'S DEGREE

Type	No.	%
M.H.S.A.	90	(38.5%)
M.B.A./M.P.A.	9	(3.9%)
M.A.	3	(1.3%)
M.Sc.	2	(0.9%)
M.N.	4	(1.7%)
M.S.W.	3	(1.3%)
More than 1	11	(4.7%)
Other	6	(2.6%)
TOTAL	128	(54.9%)

HEALTH PROFESSIONAL DEGREE/DIPLOMA

Type	No.	%
M.D.	10	(4.3%)
R.N.	29	(12.4%)
R.P.N.	3	(1.3%)
R.T.	8	(3.4%)
Physio.	1	(0.4%)
Pharm.	6	(2.6%)
TOTAL	57	(24.4%)

BACHELOR'S DEGREE

Type	No.	%
B.H.A.	1	(0.4%)
B.Comm./B.Bus	46	(19.6%)
B.A.	51	(21.8%)
B.Sc.	27	(11.5%)
B.Sc.N.	19	(8.1%)
B. Pharm.	6	(2.6%)
More than 1	8	(3.4%)
Other	12	(5.1%)
TOTAL	170	(72.5%)

ACCOUNTING CREDENTIAL

Type	No.	%
C.A.	10	(4.3%)
R.I.A.	2	(0.9%)
C.G.A.	7	(3.0%)
C.M.A.	4	(1.7%)
Other	3	(1.3%)
TOTAL	26	(11.2%)

EXPLANATION:

M.H.S.A. = Master of Health Services Administration
M.B.A. = Master of Business Administration
M.P.A. = Master of Public Administration
M.A. = Master of Arts
M.Sc. = Master of Science

TABLE 4-1 (Continued)

RESPONDENTS BY TYPE OF EDUCATION
(N = 234)

M.N. = Master of Nursing
B.H.A. = Bachelor of Health Administration
B.Comm. = Bachelor of Commerce
B.Bus. = Bachelor of Business
B.Sc.N. = Bachelor of Science in Nursing
B.Pharm. = Bachelor of Pharmacy
M.D. = Medical Doctor
R.N. = Registered Nurse
R.P.N. = Registered Psychiatric Nurse
R.T. = Registered Technician
Physio. = Physiotherapy Credential
Pharm. = Pharmacy Credential
C.A. = Chartered Accountant
R.I.A. = Registered Industrial Accountant
C.G.A. = Certified General Accountant
C.M.A. = Certified Managerial Accountant

Davis study in the United States in 1929 which found 37% of CEOs were M.D.s while 20% were R.N.s. Eleven percent of respondents hold an accounting credential.

Table 4-2 shows that respondents have been employed in health care anywhere from 2 to 47 years, with a median of 23 years of experience. They have worked for one to 17 organizations with a median of 4 organizations. Although they have spent a median of 8 years employed by their present hospital, this range is between one year and 36 years for the group as a whole, with a mode of one year. This would seem to imply recent turnover in many of the hospital CEO positions in Canada. Most carry the title of Executive Director with only 19% now holding the title President, and 18% called Administrator. Thirty-three percent of the CEOs came to their present position from being CEO of another health facility and 44% were an Assistant Executive Director or an Assistant Administrator in their previous position. Almost 50% were in one of these same three positions in their second previous position and 29% in their third previous position. The most common number of years spent in the position immediately previous was four years, and the most common number of years spent in the second, third and fourth previous positions was two years in each position. Thus, these CEOs have a reasonable amount of past administrative experience and many seem to have enjoyed a fairly rapid vertical mobility.

The majority of CEOs (65%) are located in acute care general hospitals with only 9.8% working in long term care and an additional 4.7% working in facilities for the mentally handicapped. Forty-six

TABLE 4-2

SELECTED CHARACTERISTICS OF RESPONDENTS TO

CANADIAN HOSPITAL CHIEF EXECUTIVE OFFICER SURVEY

CHARACTERISTICS	MEAN	MEDIAN	MODE	RANGE
WORK EXPERIENCE				
Years Health Care	22.5	23	18	2-47
Years in Present Hospital	10.3	8	1	1-36
Number Organizations	3.8	4	4	1-17
Years in Present Position	7.7	6	1	1-27
YEARS IN PAST POSITIONS				
One past	5.0	4	4	1-21
Two past	4.0	3	2	1-22
Three past	3.7	3	2	1-18
Four past	3.4	2	2	1-16
MONTHS OF EDUCATION				
Total Education	44.9	52	52	0-98
HSA Education	13.6	20	20	0-28
Bus. Education	37.7	32	32	0-56
H. Prof. Education	41.9	39	46	0-98
Gen. Education	31.8	32	32	0-84
DEMOGRAPHIC				
Age	49	49	42	30-68

Gender	Male	195 (83.3%)	Female	39 (16.7%)
Marital Status	Married	193 (82.5%)	Single	27 (11.5%)
			Other	14 (6.0%)
Dependent Children	Yes	138 (59.0%)	No	94 (40.2%)
			Missing	2 (0.9%)

per cent are in hospitals whose rated bed size is between 100 and 250 beds, and only 8% in hospitals whose rated bed size is over 750 beds.

Respondents range in age from 30 to 68 years with an average and median age of 49 (mode 42). Eighty-three per cent of respondents are male, 82.5% are married and 59% have dependent children. They are a group with strong associational ties, with 86% being members of the Canadian College of Health Service Executives, and 37% members of the American College of Healthcare Executives. Seventy-six percent belong to two or more occupational associations and 23% belong to one association (1% did not respond to the question). Sixty-four percent attend four or more educational conferences per year while 35% attend one to three conferences per year (1% do not attend conferences).

In summary, the typical hospital CEO in Canada is a married male, age 42 with dependent children. He is a member of the Canadian College of Health Service Executives, has 4.3 years post-secondary education, and holds the title of Executive Director in an acute care general hospital. He has been employed in the health care field for 18 years, has worked for four different health care facilities and has been in his present position for an average of 7.7 years, coming to this position from an average of four to six years in senior management.

RESULTS OF ANALYSIS OF NINE OCCUPATIONAL ROLE IDENTITY ITEMS AND FACTOR GENERATED INDEXES

Correlation of Independent and Dependent Variables

In preparation for multiple regression analyses, Pearson correlation coefficients were obtained on the independent variables in order to avoid problems due to multicollinearity. Multicollinearity is a condition in which two or more independent variables are highly correlated such that these high correlations result in unstable or inaccurate regression slopes. The highest correlation was between number of years in present position and number of years employed by the hospital (r=.77). It was decided that multicollinearity was not a problem since the correlation coefficient did not exceed .80. Thus, all variables were retained for analysis. Turning to the dependent variables, correlations among the subscales (the dependent variables) ranged from -.24 to .40. No clear relationships could be found between organizational and professional role identity dimensions. (See Tables 4-3 and 4-4).

Regression Analyses of Nine Factor Indexes and Items

Using multiple regression analyses, stepwise procedure, the nine occupational role identity indexes and the nine questionnaire items which had loaded highest on the individual factors were regressed separately on the five education variables and the four work variables.

The maximum variance explained by any one independent variable when regressing the indexes and the items on the education variables

TABLE 4-3

CORRELATION MATRIX FOR INDEPENDENT VARIABLES

	1	2	3	4	5	6	7	8
2	-.03							
3	-.18	-.35						
4	.24	-.36	-.17					
5	.38	.02	.52	.42				
6	-.21	.02	.13	-.25	-.12			
7	-.18	-.16	.36	-.23	-.03	.49		
8	.14	-.17	.14	.01	.07	-.33	.19	
9	-.09	.02	.09	-.21	-.06	.77	.53	-.17

VARIABLES

1 = MONTHS OF HEALTH ADMINISTRATION EDUCATION
2 = MONTHS OF BUSINESS EDUCATION
3 = MONTHS OF HEALTH PROFESSIONAL EDUCATION
4 = MONTHS OF GENERAL EDUCATION
5 = TOTAL MONTHS EDUCATION
6 = YEARS EMPLOYED BY HOSPITAL
7 = YEARS EMPLOYED IN HEALTH CARE
8 = NUMBER OR ORGANIZATIONS
9 = YEARS IN PRESENT POSITION

TABLE 4-4

CORRELATION MATRIX
FOR
NINE FACTOR GENERATED SCALES OF
DIMENSIONS OF OCCUPATIONAL ROLE IDENTITY
(DEPENDENT VARIABLES)

	FACTORS							
	1	2	3	4	5	6	7	8
2.	-.02							
3	.10	.05						
4.	.21	.01	.35					
5	.15	-.16	.09	.17				
6	.04	.04	.07	.12	.07			
7	.17	.10	.40	.29	.08	.12		
8	.16	.02	.32	.26	.13	.03	.26	
9	-.01	-.24	-.11	-.01	.17	.03	-.14	-.05

FACTOR GENERATED SUBSCALES

1 = BELIEF IN SELF REGULATION
2 = ORGANIZATIONAL LOYALTY
3 = BELIEF IN PUBLIC SERVICE
4 = PROACTIVE POSITION
5 = ORGANIZATION COMMITMENT
6 = CIRCUMSCRIBED AUTONOMY
7 = SENSE OF CALLING
8 = USE OF PROFESSIONAL ORGANIZATION AS MAJOR REFERRENT
9 = PROFESSIONAL AUTONOMY

was 4.6%, and when all five education variables were included in the equation the maximum variance explained was 10%. On five factor indexes and seven items, no variables entered on step one as the limits of tolerance were exceeded. (Tolerance of a variable means that proportion of the explained variance that is not accounted for by other independent variables in the regression equation. Tolerance criteria are pre-set in the SPSSX multiple regression program at .05, [probability of F-to-enter] and .10 [probability of F-to-remove], and variables must pass this criteria to enter and remain in the equation). Health professional education entered on step one of two indexes, Organizational Loyalty and Use of Professional Organization as Referrent, but explained less than 3% of variance. In both cases, the correlations were negative, indicating that increased months of health professional education resulted in a decrease in Organizational Loyalty and in Use of the Professional Organization as Major Referrent.

General education entered on step one of two factors, Proactive Position and Organizational Commitment, but again, explained less than 3% of variance. On the Organizational Commitment index health professional education entered at step two explaining an additional 4% of variance and health administration education entered on step three explaining an additional 2% of variance. With the exception of health administration education, correlations were negative.

To explore the data further, it was decided to relax the default tolerance criteria for entry (re-setting F-to-enter to .90 and F-to-remove to .99 with tolerance at .0001), thereby allowing

variables explaining only a small proportion of variance to enter. The most common education variables which entered on step one of the indexes were months of general education and months of health professional education, with months of health administration education entering on step one of Circumscribed Autonomy and total months of education entering on Sense of Calling and Professional Autonomy.

When the dimensions were regressed on the four work variables, the maximum variance explained by any one work variable on an index or item was 5.7 percent. On seven factors and seven items, no variables entered on step one. On Organizational Loyalty, years in health care and number of organizations worked for entered on steps one and two accounting for 4% of variance and showed a negative correlation. On Sense of Calling, number of years in health care explained 3.8% of variance on the index and 5.7% of variance on the item and showed a positive correlation. When the tolerance criteria were relaxed to permit greater entry of variables, work experience variables entering on step one of the indexes and items were years in health care and number of organizations worked for, except for the index of Professional Autonomy where years in present position entered on step one.

Given these rather limited results, several adjustments were made to the data to check for potential problems which might account for such low levels of variance explained. These included removing outliers on the independent variables by deleting high scores, using dummy variables for the heavily skewed education variables, and

developing composite scales from the professional indexes and the organizational indexes. None of these efforts resulted in appreciable gains in predicative power.

When education and work variables were added into the regression analysis, on five of the nine indexes no variables entered on step one. The order of entry on the other indexes was similar to those found when the education and work variables were entered separately, and the maximum variance explained by all nine education and work variables varied from 1.8% on Circumscribed Autonomy to 12% on Organizational Commitment.

Examination of residual scatterplots on the regression equations failed to show evidence of non-linear relationships. Because the total variance explained was inexplicably low, a decision was made to re-assess (with an intent to improve) the measurement of the dependent variables (occupational role identity dimensions) and to repeat the foregoing analyses.

RE-EXAMINATION OF QUESTIONNAIRE ITEMS

Several approaches were involved in a re-examination of the occupational role identity factor scores and the underlying questionnaire items. These included a review of frequency distributions of all 27 questionnaire items to determine if there was sufficient variability in response to warrant inclusion of the item (see Table 4-5), and examination of the returned questionnaires to determine if there were indications of problems with any of the items. Based on these assessments a decision was taken to eliminate

TABLE 4-5

MEANS AND STANDARD DEVIATIONS OF OCCUPATIONAL ROLE IDENTITY ITEMS

	QUESTIONNAIRE ITEMS	MEANS	S.D.	ADJUSTED[1] MEAN	S.D.
15	MAIN RESPONSIBILITY STAY IN BUDGET	3.83	1.78		
16	MAKE OWN DECISIONS RE: WORK	5.01	1.62		
17	VALUES VERY SIMILAR	6.01	1.09	6.03	.955
18	PEOPLE DO NOT REALIZE IMPORTANCE	4.75	1.63		
19	HOSPITAL ADMIN OFFERS STATUS (R)	4.56	1.56		
20	INDIVIDUAL MEMBERSHIP IMPORTANT	6.16	1.32	6.35	.940
21	GOOD IDEA ABOUT COMPETENCE	5.39	1.19		
22	WILL REMAIN IN PRESENT POSITION	3.68	1.93		
23	CEO HAS DEDICATION	5.91	.91	5.99	.715
24	CONFINE EFFORTS TO IMPLEMENT	2.75	1.77		
25	LITTLE OPPORTUNITY FOR JUDGEMENT (R)	5.69	1.76		
26	HIGH LEVEL OF IDEALISM	4.70	1.34		
27	ADMINISTRATORS ESSENTIAL	5.80	1.25	5.99	.975
28	REGULARLY ATTEND MEETINGS	5.81	1.36	6.07	.945
29	KEY ROLE TO PLAY IN CHANGE	6.22	.89	6.25	.975
30	ROUTINELY READ JOURNALS	6.08	1.06	6.21	.801
31	STABILITY IMPORTANT	4.66	1.69		
32	LITTLE REAL AUTONOMY (R)	4.77	1.71		
33	COLLEAGUES KNOW HOW EFFECTIVE	5.12	1.27	5.15	1.211
34	FUNCTIONING IMPAIRED WITHOUT ADMIN	5.76	1.42	5.84	1.286
35	INTERESTS OF HOSPITAL IMPORTANT	4.45	1.79		
36	SHOULD DEVELOP HEALTH POLICY	6.17	.90	6.24	.754
37	KNOWLEDGE NOT TRANSFERABLE	1.73	1.34	1.43	.670
38	HARD TO AGREE WITH POLICIES (R)	5.76	1.52		
39	EFFECTIVE IF CLEAR DIRECTIONS	4.58	1.82		
40	DIFFICULT TO JUDGE COMPETENCE (R)	4.77	1.54		
41	REMIND BOARD AND MEDICAL STAFF	5.71	1.26	5.82	1.063

(R) = Reverse scored

1. The means and standard deviations were adjusted by removing outliers.

a number of items including combinations which made up entire factor indexes. Reasons for these eliminations are discussed in the following section.

Rationale for Elimination of Items

Three indexes each comprised of three items were eliminated for various reasons. These were Use of Professional Organization as a Major Referrent, Belief in Public Service, and Proactive Position. In the first instance, scores on the three items (items 20, 28 and 30) of Use of Professional Organization as Major Referrent were uniformly high with a mean of 6.0 to 6.4 on a seven point scale. Answers to the three items showed that 69 to 80% of respondents were scoring in the range of 6.0 to 7.0. This uniformity can likely be explained by the fact that 86.3% of respondents were members of the Canadian College of Health Service Executives and 36.8% were members of the American College of Healthcare Executives with 77 (32.9%) having overlapping membership.

The three items comprising Belief in Public Service (items 18, 27 and 34) were eliminated for reasons of apparent confusion in scoring the items (many cross-outs or erasures), as well as several comments and questions about the relevancy of the items. There was also limited variability in answers to one of the items (item 27), which indicated that these CEOs all reflected a strong sense that hospital administrators are essential to society.

Elimination of three items (items 29, 36, and 41) virtually eliminated the factor called Proactive Position. In the case of the

first two items (items 29 and 36), the uniformly high scores and limited variability warranted their elimination. These items identify hospital chief executive officers as having a key role to play in change in health care and having an active involvement in health care policy. Respondents affirmed their belief in these statements. This high and positive consensus may be, in part, a function of attention to conference publicity and/or attendance at recent Canadian health care administrator conferences (for example, the February 1987 CCHSE Congress was entitled 'The Change Makers'). In any case, these CEOs purport to be regular educational conference attenders with 34.6% attending one to three conferences a year, and 40.2% attending four to six conferences per year. The consensus may also be a function of recent health administration literature admonishing health executives to be proactive by taking greater leadership in change in health care. Unfortunately, these high and positive responses are not supported by the answers on the open-ended questions related to the CEO's major responsibilities. For example, health care policy development was offered as a major responsibility by only 22 CEOs (9.4%). The additional Proactive Position item (item 41 which related to the CEO's duty to remind the Board and Medical Staff that the hospital exists to serve the needs of the public) was eliminated for a variety of reasons including limited variability, and low and negative factor loadings (where positive loadings were expected).

Two items originally designed to tap Organizational Commitment (items 17 and 35) were also eliminated. In the first case responses

were uniformly high (mean 6.0) with limited variability (92% scoring 5.0 to 7.0). Thus, these CEOs indicated that their values and the values implicit in the policies of their hospital were very similar. One individual pencilled a note by the item stating: "If not, I'd get out". The second item (item 35) involved the belief in the importance of putting the interests of the hospital above everything else. Many respondents indicated problems interpreting this question stating they were not clear if this implied putting the hospital's interests ahead of family interests, or even ahead of other community considerations. For this reason, the item was eliminated.

Leading off Section IV of the Questionnaire were two items which seem to have been misread and/or created enough confusion as to cast doubt on their reliability. The first (item 15) stated that the hospital CEO's main responsibility was to stay within the budget of the hospital. Although responses to this question must be interpreted with caution, it is of interest to note that these responses showed considerable variability. A crosstabulation of responses by province showed some variation in scoring across the provinces, with CEOs in Quebec and in the Atlantic provinces showing a generally higher agreement with the statement, while CEOs in Saskatchewan and Ontario showed a generally lower agreement. Early in the data collection phase of this research, the researcher was alerted by telephone and by letter to the fact that some CEOs in one region of the country found this to be a highly sensitive question and for that reason would not participate in the survey. The participation of an estimated seven or eight subjects was lost on

this account. Because of the confusion with this item, it was eliminated. The review of the returned questionnaires regarding the second lead off question (item 16) stating: "I make my own decisions about what is to be done in my work" also showed variability in responses. There appeared to be confusion in interpretation and application with comments such as "only following consultation" and "my chairman also has ideas". Thus, the item was eliminated.

Three additional items were removed, two for lack of variability. Responses to item 23 ("Most hospital administrators have a real sense of dedication to their work") were uniformly high. Responses to item 37 were also uniformly high. These hospital CEOs believed their knowledge was easily transferable to another health facility. The third item was eliminated because of a low and negative factor loading on re-factoring when a positive loading was expected.

The net result of this re-examination was a drastic reduction in occupational role identity items from 27 to 12, and a final five factor solution which was similar on both orthogonal (varimax) and oblique (oblimen) rotations, and which accounted for 63.3% of variance. (The original nine factor solution had accounted for 60.7% of variance.)

Description of the Five Factor Solution

Two of the five factors emerged essentially unchanged from the nine factor solution. These were Belief in Self Regulation with three items (items 21, 33 and 40) loading over .40 and accounting for

18% of variance; and Organizational Loyalty with four high loading items (items 22, 24, 31 and 39) and accounting for 16.7% of variance. A third factor to be called Circumscribed Autonomy was composed of two items (items 25 and 38) and explained 10.5% of variance. Sense of Calling to the Field, composed of two items (items 19 and 26) explained 9.5% of variance. The final factor consisted of a single item (item 32) which represents a Feeling of Autonomy. This item accounted for an additional 8.5% of variance explained. (See Table 4-6 and Figure 4-1).

Internal reliabilities were calculated on each index using Cronbach's Alpha as shown in Figure 4-1. Only two of the four multiple item factors are reasonably acceptable, with two 2-item factors demonstrating low reliability. Thus, for much of the analyses, both the individual items and factor generated indexes were employed.

RESULTS OF THE ANALYSES OF FIVE FACTORS

Pearson Correlations

Correlations between the independent variables and the five occupational role identity factor dimensions are shown in Table 4-7. These correlations are generally low and do not support the direction of the hypotheses. The months of study in the various types of education show inconsistent relationships with professional role dimensions (Belief in Self Regulation, Sense of Calling to the Field and Feeling of Autonomy). The work experience variables show inconsistent relationships with the two organizational role

TABLE 4-6

FACTORIAL ANALYSIS OF 12 OCCUPATIONAL ROLE IDENTITY ITEMS
ORTHOGONAL ROTATION (VARIMAX)

	FACTOR LOADINGS				
	I	II	III	IV	V
Items					
19	-.02	-.26	.11	.70	.04
21	.81	.11	.06	.05	-.09
22	-.01	.64	-.17	-.33	.06
24	.06	.66	-.26	.18	.19
25	-.07	-.02	.76	.03	.34
26	.13	.13	-.16	.64	.02
31	-.13	.70	.18	-.15	-.28
32	.01	-.02	.16	.08	.89
33	.83	.06	-.02	.22	.01
38	.20	-.08	.71	-.05	-.09
39	.08	.55	.13	.34	-.41
40	.76	-.22	.11	-.11	.09
EIGENVALUE	2.16	2.00	1.26	1.14	1.03
PERCENT OF VARIANCE EXPLAINED	18.0	16.7	10.5	9.5	8.5

Note: Items are from questionnaire. For specific question see Figure 4-1 on following page.

FIGURE 4-1

ITEMS COMPRISING DIMENSIONS OF OCCUPATIONAL ROLE IDENTITY FIVE FACTOR GENERATED INDEX SCALES WITH RELIABILITIES[1]

FACTOR 1 -	BELIEF IN SELF REGULATION (RELIABILITY = .74)	
	33	My colleagues from other hospitals know pretty well how effective I am in my job.
	21	My fellow hospital CEOs have a pretty good idea about each others competence.
	40	It is difficult for me to judge the competence of other hospital CEOs.
FACTOR 2 -	ORGANIZATIONAL LOYALTY (RELIABILITY = .57)	
	31	A very important thing to me at this stage of my life is to have stability of employment.
	24	I believe it is my job to confine my efforts to implementing policies defined by the Board.
	22	I will likely remain in my present position for some time due to personal circumstances rather than for professional reasons.
	39	I can be most effective in my job if the Board provides me with clear direction.
FACTOR 3 -	CIRCUMSCRIBED AUTONOMY (RELIABILITY = .35)	
	25	I feel I have little opportunity to exercise my own judgement in my position. (R)
	38	Often I find it hard to agree with the Board's policies on important matters related to program priorities. (R)
FACTOR 4 -	SENSE OF CALLING (RELIABILITY = .23)	
	19	The majority of hospital CEOs are in this occupation because it offers relatively high status with reasonable pay.
	26	It is encouraging to see the high level of idealism which is maintained by most hospital CEOs.
FACTOR 5 -	SENSE OF AUTONOMY	
	32	There is little real autonomy in the work of the hospital CED. (R)

[1] Cronbach's alpha

(R) = Reverse Scoring

TABLE 4-7

CORRELATION
AMONG
DEPENDENT AND INDEPENDENT VARIABLES

	DEPENDENT VARIABLES				
INDEP-PENDENT VARIABLES	SELF REGULA-TION	ORGANIZ-ATIONAL LOYALTY	CIRCUM-SCRIBED AUTONOMY	SENSE OF CALLING	AUTO-NOMY
003	-.01	.02	.01	.12	-.08
004	.12	-.15	-.04	.24	-.09
005	.12	-.15	.01	.10	.01
017	.07	.02	-.04	.15	-.03
054	-.03	-.04	.05	-.05	.03
055	-.02	.03	.16	-.06	-.01
056	-.01	-.19	-.10	.06	-.08
057	-.04	-.04	-.07	.02	.11
128	-.04	-.18	-.01	-.04	.03

VARIABLES

003 YEARS EMPLOYED BY HOSPITAL
004 YEARS EMPLOYED IN HEALTH CARE
005 NUMBER OF ORGANIZATIONS
017 YEARS IN PRESENT POSITION
054 HEALTH SERVICES ADMINISTRATION EDUCATION
055 BUSINESS EDUCATION
056 HEALTH PROFESSIONAL EDUCATION
057 GENERAL EDUCATION
128 TOTAL MONTHS EDUCATION

dimensions (Organizational Loyalty and Circumscribed Autonomy). Correlations between the five indexes are also low and do not support the hypotheses.

Multiple Regression Analysis

The four factor indexes and the five items were regressed on the five education variables, which included months of study in each of four areas and total months of education. These indexes and items were also regressed on the four work experience variables, which included years in present position, years in health care, years employed by hospital and total number of organizations worked for. Following these analyses, education and work (and later demographic) variables were added together in the regression equations.

Education Variables When Belief in Self Regulation and the highest item loading on this dimension (item 33) were regressed on the education variables using the stepwise procedure in multiple regression, the limits of tolerance were exceeded at step one and all variables explained less than two per cent of variance. Organizational Loyalty and the corresponding item (item 31) regressed on education variables explained 6% of total variance on the index and 6.8% on the item. In both cases, health professional education entered on step one explaining 3.5% of variance on the index and 4.2% of variance on the item. On the item, general education entered on step two explaining an additional 1.9% variance and health service administration and business education together added only 0.6%

variance. Except for business education, all other education variables were negatively correlated with the index and item of Organizational Loyalty. Thus, for example, increased months of health professional education results in less Organizational Loyalty.

In the stepwise regression of Circumscribed Autonomy on education variables, business education entered on step one, accounting for 2.7% explained variance on the index, and all other education variables added increased the variance explained to only 3.5%. No education variables entered on step one of the item loading highest on the index, and all education variables together accounted for only 2.2% variance explained.

On the dimension, Sense of Calling, and the respective item with the highest factor loading (item 19), and on the final dimension (Feeling of Autonomy), no education variables entered on step one and all variables together explained less than 3% variance on Sense of Calling and less than 2% on Feeling of Autonomy.

When the tolerance limits were re-set to allow maximum entry of the indexes regressed on the education variables, different types of education entered on the first two steps; however, only one variable was significant at the .05 level (months of business education regressed on Circumscribed Autonomy). (See Table 4-8). Regression of the corresponding items on the education variables resulted in no improvement of variance explained and simply changed the first order of entry on two items.

TABLE 4-8

STEPWISE MULTIPLE REGRESSION OF DIMENSIONS OF OCCUPATIONAL ROLE IDENTITY ON EDUCATION VARIABLES (ONLY STEPS ONE AND TWO SHOWN)

ROLE IDENTITY DIMENSIONS - EDUCATION VARIABLES	R^2	R^2 CHANGE	STAND-ARD BETA	SIGNIF-ICANCE (T)
SELF REGULATION				
1. GENERAL EDUCATION	.0016		-.06	.432
2. BUSINESS EDUCATION	.0032	.0016	-.04	.547
ORGANIZATIONAL LOYALTY				
1. HEALTH PROFESSIONAL EDUCATION	.0343		-.13	.099
2. TOTAL MONTHS EDUCATION	.0439	.0096	-.11	.131
CIRCUMSCRIBED AUTONOMY				
1. BUSINESS EDUCATION	.0267		.17	.012*
2. HEALTH ADMINISTRATION EDUCATION	.0313	.0046	.07	.296
SENSE OF CALLING				
1. HEALTH ADMINISTRATION EDUCATION	.0057		-.08	.233
2. BUSINESS EDUCATION	.0116	.0059	-.08	.245
FEELING OF AUTONOMY				
1. GENERAL EDUCATION	.0142		.11	.099
2. HEALTH PROFESSIONAL EDUCATION	.0168	.0027	-.05	.432

* significant at the .05 level

NOTE: All education variables are measured in months of education.

In summary, multiple regression analysis failed to indicate significant linear relationships between the education variables and occupational role identity dimensions with the exception of health professional education and general education explaining up to 4.4% of variance in Organizational Loyalty and business education explaining up to 2.7% of variance in Circumscibed Autonomy. In the former case, there is a negative relationship and in the latter case a positive relationship, that is, the more health professional and general education the less the Organizational Loyalty, and the more business education the greater the sense of Circumscribed Autonomy.

Work Variables When the indexes and the individual items were regressed on the work variables, again, few linear relationships were evident. No work variables entered on step one of Belief in Self Regulation, although on the corresponding item number of years experience in health care entered explaining 2.4% of variance. All four- work variables explained a maximum of 3.1% of variance on the index and the item. Number of organizations entered on step one for Organizational Loyalty explaining 2.5% of variance, while number of years in health care entered on step one for the item explaining 2.9% of variance. For both index and item, the maximum variance explained by all work variables was 4.5%. No work variables entered on step one on the Circumscribed Autonomy index or item. On the Sense of Calling index, the number of years experience in health care entered on step one, explaining 5.5% of variance (all work variables explained 5.9%) and no work variables entered on step one of the

corresponding item. Further, no work variables entered on the item of Feeling of Autonomy and less than 1.5% of variance was explained by all work variables.

Increasing the tolerance limits to allow maximum entry of work variables into the regression equations on all indexes and items resulted in years in health care entering on step one on four dimension indexes, with number of organizations entering on step one of Organizational Loyalty and step two of two other indexes. There were no appreciable differences when the items were regressed on the work variables. (See Table 4-9).

In summary, both number of organizations and number of years in health care explain a small per cent of variance on Organizational Loyalty, both showing negative relationships. That is, if a CEO works for many different organizations and has many years experience in health care, that CEO will have less Organizational Loyalty. Total years of experience in health care explains 5.5% of variance in Sense of Calling, i.e., those CEOs with increased years experience in health care show a greater sense of calling to the field.

Education and Work Variables When Belief in Self Regulation was regressed on both work and education variables, no variables entered on step one and only 4.9% of variance was explained by the nine variables. Thus, one must conclude that no work or education variables have strong linear relationships with the first dimension.

When Organizational Loyalty was regressed on the work and education variables, however, total months of education and years in

TABLE 4-9

STEPWISE MULTIPLE REGRESSION OF DIMENSIONS OF OCCUPATIONAL ROLE IDENTITY ON WORK VARIABLES (ONLY STEPS ONE AND TWO SHOWN)

ROLE IDENTITY DIMENSIONS - WORK VARIABLES	R^2	R^2 CHANGE	STAND-ARD BETA	SIGNIF-ICANCE (T)
SELF REGULATION				
1. YEARS IN HEALTH CARE	.0154		.10	.1251
2. NUMBER OF ORGANIZATIONS	.0251	.0097	.10	.1396
ORGANIZATIONAL LOYALTY				
1. NUMBER OF ORGANIZATIONS	.0258		-.14	.0438*
2. YEARS IN HEALTH CARE	.0413	.0155	-.13	.0596
CIRCUMSCRIBED AUTONOMY				
1. YEARS IN HEALTH CARE	.0021		-.08	.3012
2. YEARS EMPLOYED BY HOSPITAL	.0056	.0034	.07	.3826
SENSE OF CALLING				
1. YEARS IN HEALTH CARE	.0552		.22	.0009**
2. NUMBERS OF ORGANIZATIONS	.0582	.0030	.06	.4013
FEELING OF AUTONOMY				
1. YEARS IN HEALTH CARE	.0071		-.11	.1616
2. YEARS IN PRESENT POSITION	.0089	.0018	.05	.5257

* significant at the .05 level
** significant at the .001 level

health care entered on steps one and two respectively and explained 6.8% of variance (9.6% of variance was explained by all variables). On Circumscribed Autonomy, business education entered on step one accounting for 2.9% of variance with all other work and education variables explaining only 5.2% of variance.

Years in health care entered on step one of the regression on Sense of Calling explaining 4.7% of variance, and all variables explained 8% of variance. No variables entered on step one on Feeling of Autonomy, and all variables explained only 1.9% variance.

When the tolerance limits were increased to allow maximum entry of education and work variables, it was apparent that different dimensions of occupational role identity were effected by different combinations of education and work variables. Yet, only four entries (two on the dimension of Organizational Loyalty, one on Circumscribed Autonomy and one on Sense of Calling) were significant at the .05 level. Table 4-10 provides the first three entries of these stepwise regressions on each dimension.

Education, Work and Demographic Variables Given the limited correlations apparent in the foregoing analyses, additional variables were added to the regression equations. These included a number of demographic variables such as age, gender, marital status and dependent children, as well as variables related to size and type of hospital. Table 4-11 provides a summary of findings of these expanded regression models. Although the explanatory power of the

TABLE 4-10

STEPWISE MULTIPLE REGRESSION OF DIMENSIONS OF OCCUPATIONAL ROLE IDENTITY ON EDUCATION AND WORK VARIABLES (ONLY STEPS ONE TO THREE SHOWN)

ROLE IDENTITY DIMENSIONS - EXPLANATORY VARIABLES	R^2	R^2 CHANGE	STAND-ARD BETA	SIGNIF-ICANCE (T)
SELF REGULATION				
1. NUMBER OF ORGANIZATIONS	.0161		.11	.0985
2. YEARS IN HEALTH CARE	.0269	.0108	.14	.0678
3. HEALTH PROFESSIONAL EDUCATION	.0321	.0051	-.08	.2834
ORGANIZATIONAL LOYALTY				
1. TOTAL MONTHS EDUCATION	.0442		-.20	.0016**
2. YEARS IN HEALTH CARE	.0676	.0234	-.13	.0480*
3. NUMBER OF ORGANIZATIONS	.0809	.0134	-.12	.0754
CIRCUMSCRIBED AUTONOMY				
1. BUSINESS EDUCATION	.0289		.18	.0079**
2. NUMBER OF ORGANIZATIONS	.0315	.0027	.07	.3470
3. YEARS EMPLOYED BY HOSPITAL	.0333	.0017	.04	.5331
SENSE OF CALLING				
1. YEARS IN HEALTH CARE	.0469		.24	.0004**
2. GENERAL EDUCATION	.0533	.0064	.12	.1035
3. TOTAL MONTHS EDUCATION	.0603	.0069	-.09	.2048
FEELING OF AUTONOMY				
1. GENERAL EDUCATION	.0081		.10	.2082
2. YEARS IN HEALTH CARE	.0114	.0033	-.06	.4224
3. TOTAL MONTHS EDUCATION	.0129	.0015	-.04	.5646

* significant at .05 level
** significant at .01 level

NOTE: All education variables are measured in months of education.

TABLE 4-11

STEPWISE MULTIPLE REGRESSION OF DIMENSIONS OF OCCUPATIONAL ROLE IDENTITY ON EDUCATION, WORK AND DEMOGRAPHIC VARIABLES (ONLY STEPS ONE TO SIX SHOWN)

ROLE IDENTITY DIMENSIONS - EXPLANATORY VARIABLES	R^2	R^2 CHANGE	STANDARD BETA	SIGNIFICANCE (T)
SELF REGULATION				
1. RATED BED SIZE	.0253		.17	.0130*
2. YEARS IN HEALTH CARE	.0409	.0157	.09	.2179
3. NUMBER OF ORGANIZATIONS	.0508	.0098	.11	.0934
4. TOTAL MONTHS EDUCATION	.0586	.0078	-.11	.0947
5. TYPE OF FACILITY	.0678	.0092	-.10	.1342
6. GENDER	.0729	.0051	.08	.2831
ORGANIZATIONAL LOYALTY				
1. TOTAL MONTHS EDUCATION	.0486		-.15	.0278*
2. GENDER	.0752	.0266	-.16	.0208*
3. NUMBER OF ORGANIZATIONS	.0991	.0238	-.15	.0178*
4. TYPE OF FACILITY	.1106	.0116	.11	.0802
5. AGE OF SUBJECT	.1203	.0097	-.09	.1404
6. RATED BED SIZE	.1289	.0086	-.09	.1511
CIRCUMSCRIBED AUTONOMY				
1. BUSINESS EDUCATION	.0236		.14	.0518
2. TYPE OF FACILITY	.0311	.0076	-.09	.1623
3. NUMBER OF ORGANIZATIONS	.0368	.0057	.13	.0687
4. YEARS EMPLOYED BY HOSPITAL	.0456	.0089	.22	.0422*
5. YEARS IN PRESENT POSITION	.0536	.0080	-.14	.1706
6. HEALTH PROFESSIONAL EDUCATION	.0571	.0034	-.06	.3816
SENSE OF CALLING				
1. AGE OF SUBJECT	.0683		.22	.0031**
2. TYPE OF FACILITY	.0795	.0112	.11	.0983
3. GENDER	.0891	.0096	-.18	.0325*
4. DEPENDENT CHILDREN	.1001	.0109	.10	.2114
5. MARITAL STATUS	.1062	.0061	-.09	.2646
6 NUMBER OF ORGANIZATIONS	.1105	.0043	.07	.3156

TABLE 4-11 (continued)

STEPWISE MULTIPLE REGRESSION OF DIMENSIONS OF OCCUPATIONAL ROLE IDENTITY ON EDUCATION, WORK AND DEMOGRAPHIC VARIABLES (ONLY STEPS ONE TO SIX SHOWN)

ROLE IDENTITY DIMENSIONS - EXPLANATORY VARIABLES	R^2	R^2 CHANGE	STAND-ARD BETA	SIGNIF-ICANCE (T)
FEELING OF AUTONOMY				
1. GENERAL EDUCATION	.0064		.07	.3557
2. RATED BED SIZE	.0119	.0056	-.07	.2960
3. TYPE OF FACILITY	.0155	.0036	-.06	.4127
4. MARITAL STATUS	.0177	.0022	-.06	.3699
5. YEARS IN HEALTH CARE	.0211	.0034	-.07	.3345
6. NUMBER OF ORGANIZATIONS	.0238	.0028	.05	.4419

* significant at .05 level
** significant at .001 level

NOTE: All education variables are measured in months of education.

additional variables combined with education and work variables continued to be low, some of the following patterns were evident.

1. Size of hospital, years in health care, number of organizations worked for and total months of education were related to Belief in Self Regulation.
2. Total months of education, gender, number of organizations worked for and type of facility were related to Organizational Loyalty.
3. Business education, type of facility, number of organizations worked for, and years employed by hospital were related to Circumscribed Autonomy.
4. Age, type of facility, gender, dependent children and marital status were related to Sense of Calling.
5. General education, rated bed size, type of facility and marital status were related to Feeling of Autonomy.

In all cases, total variance explained by single variables which entered on step one ranged from 0.6 to 6.8%, and the maximum variance explained by all variables added into the equation for any one dimension was 15.2% (for Organizational Loyalty).[1]

Crossbreak Analyses

Because a lack of strong linear relationships was evident, the procedure of crossbreak analysis (a technique designed to explore differences in sub-populations) was employed to investigate the possibility that interaction or conditional relationships might be affecting regression outcomes. A conditional relationship, often

called an interaction, occurs when a variable has some effect under one condition but a different effect under another condition. When such a relationship prevails, statistical methods based on additive (i.e., non-interactive) linear modelling may not yield statistically significant results. The conditional variable may act as a suppressor making relationships between independent and dependent variables.

Inspection of the crossbreak tables showed a number of large differences in means whose direction of change was contingent upon the presence of other variables. In order to assess the significance of differences in means across the education, work and demographic groupings, and to test for significant interactions, the exploratory statistical technique of Analysis of Variance was employed.

Analysis of Variance

In Analysis of Variance (ANOVA) the observed variability in the subject responses is partitioned into two components -- that which can be explained by being within a group and that which occurs due to between group differences. The hypothesis being tested in ANOVA is that at least one group mean is different from at least one other group mean. Although differences in population means might be shown to be significant by ANOVA, a subsequent test is necessary to determine which differences are statistically significant. A technique for accomplishing this end is the multiple comparison procedure. The multiple comparison procedure protects against identifying too many differences as significant, which problem can

occur as a statistical artifact of the t-test when many pairs of means are compared. In other words, this technique protects against a statistical decision error of rejecting the null hypothesis when it is true (Type I error). The multiple comparison method employed in this study was the Scheffe method, which provides a conservative estimate of pairwise comparison of means (Norusis, 1983).

ANOVA provides indication of the main effects of independent variables on the dependent variable, as well as indications of interactions. As a first step in this analysis, the two work variables which had provided the best explanation in crosstabulation and multiple regression techniques (i.e., number of years in health care and number of organizations) were combined with each of the five education variables and one other variable thought to make a difference (i.e., size of hospital). These variables were then analyzed with each of the five indexes.

When health services administration education was combined with number of years in health care, number of organizations, and hospital size, a main effect of number of years in health care was identified on the index of Feeling of Autonomy. Four way interactions were also identified on three of the factor indexes but none were found to be significant using the Scheffe test.

When business education was combined with number of years in health care, number of organizations and hospital size, number of organizations was shown to have a main effect on Organizational Loyalty and business education was found to have a main effect on Circumscribed Autonomy. In addition, several interactions were shown

to be significant on the Scheffe test. One was an interaction between size of hospital and business education as these variables affect Circumscribed Autonomy. The second significant interaction was between size of hospital and number of years in health care as these variables affect Sense of Calling. The final interaction was between size of hospital and number of years in health care as these affect Feeling of Autonomy.

When health professional education was combined with the two work variables and hospital size, only one main effect of years of experience in health care on Sense of Calling was found.

Finally, when general education was combined with number of years in health care, number of organizations and size of hospital, two main effects were identified, and several significant interactions were evident. There was a main effect of number of organizations with Organizational Loyalty, and a main effect of number of years in health care with Feeling of Autonomy. The statistically significant interactions all affected Sense of Calling: a two way interaction of number of years in health care and hospital size; a three way interaction of number of organizations, size of hospital and general education; and a four way interaction.

As a final step in this analyses, three additional combinations of variables were analyzed in relation to each of the five dimension indexes. Choice of the education, work and demographic variables was guided by the findings of the previous analyses. These combinations were 1) size of hospital, years in present position and total months of education with each of the four educational type variables, 2)

size of hospital, age of subject and total months of education with each of the four educational type variables, and 3) type of facility, years in health care and total months of education with each of the four educational type variables. The results of these analyses confirm many of the earlier findings of main effects, and also confirm that there are statistically significant two way, three way and four way interactions among these variables (see Table 4-12).

In summary, the results from ANOVA confirmed a number of the earlier findings regarding the individual effects of the independent variables on occupational role identity dimensions. In terms of main effects, there appears to be only one main effect of total months of education on Belief in Self Regulation. One work variable (number of organizations worked for), one educational variable (total months of education) and rated bed size were found to have significant main effects on Organizational Loyalty. One educational variable (business education) had a main effect on Circumscribed Autonomy, and three work variables (years in health care, years employed by hospital, and years in present position) and age of subject have main effects on Sense of Calling. Finally, Feeling of Autonomy is affected directly by one education variables (general education) and one work variable (years in health care).

In addition to these main effects, all dimensions of occupational role identity are affected by statistically significant two, three or four way interactions of education, work and demographic variables, with the exception of the dimension of Belief in Self Regulation.[2]

TABLE 4-12

ANALYSIS OF VARIANCE
DIMENSIONS OF OCCUPATIONAL ROLE IDENTITY WITH
WORK, EDUCATION AND DEMOGRAPHIC VARIABLES

DIMENSION	MAIN EFFECTS	INTERACTIONS
Belief in Self Regulation	Total months' education (128)	N.S.
Organizational Loyalty	Number of organizations (005) Total months education (128) Rated bed size (022)	022 x 017 017 x 128 017 x 022 x 054 017 x 128 x 054
Circumscribed Autonomy	Business education (055)	022 x 055 022 x 054 017 x 128 x 022 017 x 128 x 022 x 054
Sense of Calling	Years in health care (004) Years employed by hospital (003) Years in present position (017) Age (112)	004 x 022 023 x 054 022 x 128 005 x 022 x 057 003 x 128 x 057 004 x 005 x 022 x 057 057 x 128

TABLE 4-12 (continued)

ANALYSIS OF VARIANCE
DIMENSIONS OF OCCUPATIONAL ROLE IDENTITY WITH
WORK, EDUCATION AND DEMOGRAPHIC VARIABLES

DIMENSIONS	MAIN EFFECTS	INTERACTIONS
Feeling of Autonomy	Years in health care (004)	004 x 055
	General education (057)	004 x 022
		128 x 056
		128 x 054

Explanation of Variables:

003 Number of years employed by hospital
004 Number of years in health care
005 Number of organizations worked for
017 Number of years in present position
022 Rated bed size of hospital
023 Type of hospital/facility
054 Total months of health administration education
055 Total months of business education
056 Total months of health professional education
057 Total months of general education
123 Age of respondent
128 Total months of education (all education)

However, again, the variance explained by all variables (main effects and interaction) continues to be limited, ranging from .07 to 6.9%. Thus even the interaction effects explain a very modest amount of variance.

Analysis of Administrative Dilemmas

The administrative dilemmas, which were designed as alternate measures of attitude were found to be loosely related to the occupational role identity subscales; and were not found to be correlated with education or work variables with the exception of the patient medication error dilemma. On this administrative dilemma, years in present position was significant on a crosstabulation analysis, with a chi square value of 4.67 ($p=0.03$). On an analysis of variance, no significant main effects were found but years in present position, and years in health care showed significant two way interactions.

Careful study of the responses to the administrative dilemmas and the reasons for the decisions suggested confirms the importance of structural and situational factors of the work setting in influencing attitudes and decision-making. The findings from these administrative dilemmas are discussed further in the following chapters.

CHAPTER SUMMARY AND CONCLUSIONS

A number of statistical techniques were employed to investigate the correlates of the occupational role identity of the hospital

chief executive officer. When multiple regression failed to produce significant findings on the nine dimension indexes derived through factor analysis, or the leading items, a decision was made to re-examine the attitude scales to reduce problems of measurement. This assessment resulted in the elimination of many items, including four entire factors, and a move from a nine factor solution which explained 60.7% of variance to a five factor solution explaining 63.3% of variance. When analyses of these new factor subscales and their items failed to yield better explanations on multiple regression analyses, several other statistical techniques were employed, including methods to test for conditional relationships. Analysis of variance revealed the presence of numerous complex interactions of education, work and demographic variables, suggesting that the correlates of a role identity of a hospital CEO are not well explained by the linear additive model on which the hypotheses are based. Thus, the hypotheses must be rejected for lack of conclusive evidence.

In rejecting the hypotheses, at least three explanations might be offered. The first explanation might be that the population studied is unusual, and that while the explanatory model might still be valid, it cannot be supported with data derived from this, perhaps, atypical group of subjects. A second explanation might be that the measurements were not sensitive enough to pick up the differences that exist. Third, it might be that the theory does not adequately explain correlates of an occupational role identity.

In the following two chapters, these explanations will be considered. In chapter five, additional findings of the study are reported. These findings show that the study population was remarkably homogenous. In chapter six, possible reasons for this homogeneity are offered, and problems of measurement and limitations of the theory are discussed.

FOOTNOTES TO CHAPTER 4

1. The reader should note that even those independent variables which do indicate significant linear relationships with various dimensions of occupational role identity should be interpreted with caution since they may include some significant relationships which occur by chance alone when the dependent variable is regressed on many variables.

2. Two independent variables which seemed to interact with education and work variables were size and type of hospital.

CHAPTER 5

FINDINGS: EVIDENCE OF HOMOGENEITY

Since the findings reported in chapter four failed to support the hypotheses and failed to explain how or why CEOs may differ in their occupational role identities, the purpose of this chapter is to present additional findings which may explain these limited findings. These additional data indicate that the occupation group studied is remarkably homogeneous. Evidence will be drawn mainly from the answers to the open-ended questions, including those pertaining to the administrative dilemmas.

A HOMOGENEOUS GROUP

Based on the demographic description provided in chapter four, it is not hard to argue that this study population is rather homogeneous. Table 4-2 previously presented, and the accompanying discussion, demonstrate the similarities in age, sex, marital status and occupational membership. Other results of this survey also lend support to this observation. For example, on the open ended questions asking the respondents to identify major responsibilities, major problems and most important knowledge needed by a hospital CEO, there is a considerable agreement.

Table 5-1 summarizes responses provided to the question regarding major responsibilities of the hospital CEO. Leadership, strategic planning, coordination of resources, people management and financial management emerge as top priorities for all CEOs. When

TABLE 5-1

MAJOR RESPONSIBILITIES IDENTIFIED
BY HOSPITAL CEOs

TYPE OF RESPONSIBILITY	STATEMENT ONE N=229	TWO N=198	THREE N=143
1. Leadership/Climate of Growth Recruit and Develop Senior Staff	14.5%	5.6%	4.3%
2. Strategic Planning/Meeting Community Needs	10.7	9.4	5.6
3. Coordination of Resources/ Facilitator	9.8	7.3	5.6
4. Quality of Care/Patient Care	8.5	7.3	3.4
5. People Management/Communication/ Motivation	8.5	6.8	8.5
6. Plan,Organize,Direct,Control/ POSDCORB*	8.1	0.9	---
7. Day to Day Operations	7.7	5.1	1.7
8. Responsibility to Board/Advise/ Represent	6.8	7.3	3.8
9. Financial Management/Funding	6.8	9.4	7.3
10. Policy Implementation/ Execute Goals	6.4	6.8	2.1
11. Policy Development/Formulation	2.6	3.8	3.0
12. External Relations to Govt., Community/Public Relations	2.1	6.0	6.4
13. Liason/Community,Board,Staff	2.1	3.4	3.4
14. Working with Medical Staff	0.9	3.0	3.8
15. Other (Meet standards,Survival of Organization,Promotion of health,Research and Teaching,etc.)	2.4	2.5	2.2
NO RESPONSE	2.1	15.4	38.9
TOTAL	100.0	100.0	100.0

responsibilities identified were compared by rated bed size of facility, there was little variation, with leadership and planning identified in the first five major responsibilities across all hospital sizes. In hospitals where rated bed size was 100-249 beds, CEOs were somewhat more likely to identify coordination of resources, people management and day to day operations as major responsibilities. This is not surprising given that the "most apparent effect of size is to involve the manager with more activities at a more detailed level than is true in large organizations" (Munson and Zuckerman, 1983:57). Although some differences were apparent across types of facilities, the leadership role was most commonly identified by all. In facilities devoted to the care of psychiatric or mentally retarded patients, the quality of patient care emerged as a top responsibility, while in extended care settings, day to day operations and POSDCORB functions were identified as major responsibilities. (POSDCORB is an acronym for a classical model of the management role. The initials stand for the activities of Planning, Organizing, Staffing, Directing, Coordinating, Reporting, Budgeting.) Clearly, size of facility would play a part in identifying day to day operations. Reasons for the frequency of POSDCORB type activities are not as clear, although a lack of sophistication in articulating one's role could be one factor, while a greater uniformity of client served is another possible explanation.

These similarities in major responsibilities identified are not unique to this present survey. Although organizational theorists and

managerial experts differ somewhat in their categorizations of executive or managerial roles, there is widespread agreement that roles are quite similar across all types of executives, with size and type of facility influencing only differences in amount of time and attention devoted to various responsibilities (Mintzberg, 1973; Munson and Zuckerman, 1983).

Even greater similarities in major problems or frustrations identified by hospital CEOs were evident. Table 5-2 shows the problems identified, with fiscal constraints, medical staff relationships, dealing with government bureaucracy and powerlessness topping the list, the first two by a wide margin. When problems identified were compared by rated bed size of facility, fiscal constraints were identified as the first major problem by CEOs in all sizes of facilities. Achieving consensus was cited as the second major problem by CEOs in hospitals over 500 beds, dealing with government bureaucracy by CEOs in hospitals of rated bed size 250 to 499 beds, and medical staff relationships by CEOs from hospitals rated 100-249 beds. When problems identified were compared across type of facility, fiscal constraints again topped the list across all types except for CEOs from facilities with acute and extended care services are combined, where medical staff relationships were identified as most problematic. Of interest is the fact that in two previous U.S. hospital administrator studies by Prall (1948) and Dolson (1963), problems identified were strikingly similar, with working with medical staff and financial management cited as two of the five top problems encountered by hospital administrators. The

TABLE 5-2

MAJOR PROBLEMS IDENTIFIED
BY HOSPITAL CEOs

TYPE OF PROBLEM	STATEMENT ONE N=229	TWO N=165	THREE N=71
1. Fiscal Constraints/Funding	32.5%	11.5%	4.7%
2. Medical Staff Power/Medical Staff Relationships	9.4	10.3	5.1
3. Dealing with Government Bureaucracy	9.4	6.0	3.8
4. Achieving Consensus/Unity of Purpose	7.3	3.4	2.1
5. Lack of Control/Powerlessness	6.4	7.7	0.9
6. Balancing Needs,Demands,Resources	6.0	5.6	1.7
7. Other Constraints(Time,Personnel)	4.7	6.0	0.9
8. Political Nature of System	3.8	3.8	2.1
9. Slowness to Effect Change	3.8	2.6	0.4
10. Lack of Government Planning/ Commitment	3.0	2.6	0.4
11. People Management/Communication	2.6	2.1	---
12. Rapid Rate of Change in Environ	2.1	0.4	0.4
13. Unionization imposing Constraints	1.3	3.0	2.1
14. Uneducated Board Members	1.3	2.1	1.3
15. Complexity of Organization	1.3	---	0.4
16. Other (Setting priorities, Apathetic staff,lack of data,etc.)	3.0	3.4	4.0
NO RESPONSE	2.1	29.5	69.7
TOTAL	100.0	100.0	100.0

dilemma of working with medical staff is, no doubt, indicative of continuing problems in the power relations of the CEO. Problems of fiscal management reflect the chronic fiscal crisis of services in the public sector domain.

Finally, when CEOs were asked to state the most important knowledge a hospital CEO must have to do his job well, areas of knowledge and skills identified were also very similar (see Table 5-3). Respondents generally failed to discriminate between knowledge (which was the question asked), and skills, abilities, and other qualities. People skills, or human relations skills, emerged as the most important content area by a substantial number of CEOs. One hundred and fourteen CEOs (48.7%) identified these skills as important in the first instance, and an additional 19% of CEOs identified these skills as important in second and third statements. Among the other areas identified, responses were more evenly spread across leadership, management ability, fiscal management and other areas. Of interest is the "commonsense" knowledge identified by eleven CEOs and "knowing self" identified as important knowledge by seven CEOs. CEOs from hospitals of all rated bed sizes were in complete agreement with the first four knowledge and skill areas shown in Table 5-3, except for CEOs of hospitals of rated bed size 250-499 where political know-how was given third priority. Across different types of facilities, people skills were dominant with no predominant patterns merging in second and third choices.

A number of responses to the question regarding the most important knowledge needed, supported the premise that common sense

TABLE 5-3

IMPORTANT KNOWLEDGE IDENTIFIED BY HOSPITAL CEOs

TYPE OF KNOWLEDGE	STATEMENT ONE N=228	TWO N=158	THREE N=78
1. People Skills/Human Relations/ Communication/Motivation	48.7%	15.8%	3.4%
2. Management Ability/Delegation	9.8	6.4	2.1
3. How to Lead/Set Climate/Develop Staff	6.8	6.8	3.0
4. Understand Health Care System/ Environment	4.7	4.3	3.4
5. Fiscal Management	3.8	9.4	3.8
6. Understand Complex Organizations	3.8	3.4	2.1
7. Understand Health Professionals	3.4	1.7	2.1
8. Know How to Think	2.6	2.6	0.9
9. Commonsense	2.1	1.3	1.3
10. Know Politics	2.1	2.1	1.7
11. How to Work with Government	1.3	1.7	1.3
12. Know Self/Limitations	1.3	1.3	0.4
13. Know How to Work with Board	1.3	0.4	0.4
14. Know Laws/Labor Relations	0.9	1.7	1.3
15. Know How to Set Priorities	0.4	2.1	1.3
16. Know How to Make Decisions	0.4	0.9	1.3
17. Other (Public Relations, Information Systems,etc.)	4.2	5.6	3.5
NO RESPONSE	2.6	32.5	66.7
TOTAL	100.0	100.0	100.0

and knowledge of self, as well as other attributes, were potentially more important than academic knowledge. Several selected comments of this nature are provided below.

> No specific knowledge necessary other than to know that you do not have all the answers. (CEO 148)
>
> A strong sense of propriety and the ability to rely on commonsense. (CEO 173)
>
> The most important attributes are courage, confidence (in yourself and others), compassion and interpersonal competence. This is a very person oriented field and one has to have empathy but also rigid adherence to values and principles. (CEO 146)
>
> Above average intelligence, social maturity, inner motivation, sense of security, human relations skills. (CEO 119)
>
> Tact, diplomacy and good judgment. (CEO 232)
>
> The word "knowledge" may be limiting. Many personality "traits" are as important as knowledge per se -- they are intertwined in the good CEO. Commonsense, dedication (including the ability to work long hours), integrity (and often a sense of humor) are needed..." (CEO 083)

Even the identification of positions of significant other persons to whom the CEO relates (Item 14) revealed a similarity in the top two positions identified inside the hospital and the top three identified outside the hospital. Table 5-4 shows one or all vice-presidents or assistant executive directors and the Chief of Medical Staff or the President of Medical Staff as significant persons inside the hospital, while Table 5-5 identifies the Chairman of the Board, Government deputies or consultants, and other CEOs as significant persons outside the hospital.

TABLE 5-4

POSITIONS OF THREE SIGNIFICANT PERSONS INSIDE HOSPITAL TO WHOM CEO RELATES

TYPE OF POSITION	STATEMENT ONE N=231	TWO N=213	THREE N=119
1. One or All Vice-Presidents/ Assistant Executive Directors/ Senior Management	33.8%	18.8%	6.0%
2. Chief of Medical Staff and/or President of Medical Staff	30.0	19.6	8.1
3. VP/AED Patient Services/ Director of Nursing	12.0	20.5	8.6
4. VP/AED Medical, Clinical, or Medical Director	8.1	5.6	2.6
5. VP/AED Finance/Director Finance	5.1	9.4	10.3
6. Doctors/Medical Staff	3.8	5.1	1.3
7. Department Heads/Clinical Heads	1.7	8.5	6.0
8. Personnel Director	0.4	2.1	4.3
9. Hospital Staff	0.4	0.4	0.4
10. Executive Secretary	---	0.4	1.3
11. Owners	0.4	---	---
12. Other	6.8	0.4	2.0
NO RESPONSE	1.3	9.2	49.1
TOTAL	100.0	100.0	100.0

TABLE 5-5

POSITIONS OF THREE SIGNIFICANT PERSONS OUTSIDE HOSPITAL TO WHOM CEO RELATES

TYPE OF POSITION	STATEMENT ONE N=232	TWO N=210	THREE N=169
1. Chairman of the Board	60.7%	1.7%	0.4%
2. Assistant Deputy Minister/ Consultants from Ministry	13.2	35.9	16.2
3. Board Members	12.4	6.4	---
4. Other CEOs	2.1	15.0	17.1
5. Minister/Deputy Minister	2.1	7.3	2.1
6. District/Regional Health Council	1.3	6.8	6.4
7. Hospital Association	1.3	1.7	6.8
8. Community Leaders/Citizens	1.3	2.6	4.3
9. Deans/University Officials/ Professors	0.4	2.6	4.7
10. Elected Politicians	0.4	2.6	3.8
11. Media/Press	---	2.1	1.7
12. Patients/Families of Patients		0.9	0.9
13. Lawyers/Labor experts/Bankers	---	0.9	1.3
14. Salvation Army/Sister Superior	1.7	---	0.4
15. Union Officials	---	0.4	0.9
16. Other Health Professionals	---	0.4	0.4
17. Other Business executives	---	0.4	---
18. Police/Parole Board	---	0.4	---
19. Other (Private consultants, Auxillary President/Wife,etc.)	2.2	1.7	4.4
NO RESPONSE	0.9	10.2	28.2
TOTAL	100.0	100.0	100.0

Responses to the administrative dilemmas also showed significant uniformity. These dilemmas comprised questions 42 to 44 of the Questionnaire (see Appendix A), and will be described here briefly. The first dilemma described a situation in which a nursing medication error had occurred, resulting in a one week delay of the patient's discharge. The patient and the family had been told that the patient's set-back was due to an unanticipated drug reaction. Complicating this situation was the fact that a local newsman was a close relative of the patient, and there was a concern about adverse publicity for the hospital. The second dilemma described a situation where the hospital was experiencing a rapid decline in occupancy rate over a three year period, and other hospitals in close proximity were adequately meeting the needs for the service. Institutional politics were opposed to discontinuing the service although it seemed sensible to do so. The final dilemma concerned a situation of potential medical incompetence. In this scenerio the CEO learns that a physician on staff is being recommended for re-appointment in spite of criticism by the majority of his colleagues for unethical conduct and general incompetence. For each of these situations CEOs were asked to state the course of action they would take in such a situation and to provide reason(s) for their action.

In responding to the situation describing potential medical incompetence, 70% of CEOs were definitive in suggesting a need for action by careful documentation; or by pressuring the Medical Advisory Committee to act or taking the matter to the Board. In the

dilemma regarding resource allocation, again, CEOs were fairly united in the need to act, albeit some were more definitive than others. Only the situation of the medication error showed substantial variation, but that variation resulted in two polar positions. One group of CEOs clearly stated that no further action should be taken with the patient, while the second group maintained that the patient must be told the truth (see Table 5-6).

These findings portray a fairly homogenous group leading to the observation that, despite diverse educational backgrounds, the organization itself may exert a much more powerful influence in shaping the attitudes and the behaviour of the CEO.

CHAPTER SUMMARY AND CONCLUSIONS

In this chapter, additional findings from the survey lead to the conclusion that the occupational group studied is remarkably homogenous in many demographic characteristics (age, sex, marital status, etc.) and in the way they view their major responsiblities, problems, and significant persons to whom they relate in doing the job of hospital CEO. In addition, their indication of knowledge needed to do the job of the CEO tend to be quite similar and is not confined to knowledge only. A significant question raised by these findings is how these hospital administrators, who come from varying backgrounds and from varying educational experiences, can become so homogeneous in their perceptions of their role and their

TABLE 5-6

REPONSES TO ADMINISTRATIVE DILEMMAS: COURSE OF ACTION RECOMMENDED BY RESPONDENT

CASE I. PATIENT MEDICATION ERROR	PERCENT RESPONDING
Statement made- no position taken	2.6%
Unclear - Assumes truth told?	21.8
Do Nothing except internal review	35.0
Refer to a Committee, inform Board	1.3
Encourage staff to disclose truth	2.1
Ensure patient is told the truth	35.0
Other or no response	4.2
Total	100.0

CASE II. RESOURCE ALLOCATION	PERCENT RESPONDING
Statement made - no position taken	0.9%
Do nothing or actively maintain service	1.3
Plan for another service	2.6
Refer to Committee	8.5
Prepare evidence, leave to Board	14.5
Review mission/goals of hospital	8.1
Prepare course of action/sell to Board	34.2
Negotiate with staff, neighboring hosp.	21.8
Close the service	6.8
Other or no response	1.3
Total	100.0

CASE III. SUSPECTED MEDICAL INCOMPETENCE	PERCENT RESPONDING
Statement made - no position taken	0
Do nothing, responsibility of med staff	3.8
Refer to Committee or MAC	5.1
Discuss with Chief of Staff/Board Chair	18.8
Ensure facts well documented	28.2
Pressure MAC to review or take to Board	42.3
Get resignation	0.4
Other or no response	1.4
Total	100.0

responsibilities. It is the purpose of chapter six to attempt to provide some possible explanations for this homogeneity, and to discuss the findings of the study in general.

CHAPTER 6

DISCUSSION OF FINDINGS: ALTERNATE EXPLANATIONS

Given the limited evidence in support of the hypotheses as discussed in chapter four, and the evidence in support of the case that the study population itself is rather homogenous, it is the purpose of this chapter to explore reasons for the homogeneity in the study population and to elaborate on two other possible explanations for the failure to support the hypotheses. The two additional explanations to be discussed are problems related to measurement, and limitations of the theoretical perspective.

HOMOGENEITY OF THE STUDY POPULATION

It is possible that, despite the diverse educational backgrounds of the study population (hospital CEOs), the influence of the organizational context overrides education to "homogenize" the CEOs producing a group that is remarkably similar in the views they express. In fact, the analysis of the structural attributes of the 'profession' of hospital administration (based on Larson's [1977] criteria) discussed in Chapter 2 may well have anticipated this study's findings. It was concluded in Chapter 2 that there are significant structural barriers to the increasing professionalism of hospital administration. These barriers are imposed because hospital administrators have both limited authority and diffuse accountability, resulting in the lack of a formal base of power. Further, the practice of hospital administration is based upon a

broad and ill-defined knowledge base, and there is a lack of standardized training programs for entry to practice in the field of hospital administration. Given these deficiencies and the diversity of education and work experience, one might have expected heterogeneity. However, given the imperative that those who rise to the top must 'fit in', a certain amount of homogeneity would be anticipated. Thus, a limited effect of education on role identity might be expected.

The Organization Shapes Attitudes (and Behavior)

As described in Chapter 2, hospital CEOs are agents of their hospital boards and serve numerous clientele, including the board, the medical staff, patients, politicians and bureaucrats. Many of these clientele can directly or indirectly arrange for the CEO's dismissal. Further, because most hospitals are publicly funded organizations, the hospital CEO's performance is very much in the public eye. And since there are many goals of a hospital, some being rather ambiguous (e.g., health care) and some being in direct conflict (e.g., patient comfort versus student learning needs, or balancing the hospital budget while maintaining a high quality of patient care), CEOs are frequently caught in the position of having to compromise their values and having to conform to the agendas of others.

Hall (1969) emphasized that in organizationally-based occupations, there are built-in obligations, rewards and relationships. While the role of the individual is vital, the

individual can operate only within limits set by the organization. Thus, the contents of the role as well as the incumbents in the role are constrained by the organization.

The CEOs who responded seemed cognizant of the constraints of their role, i.e., their circumscribed autonomy or coerced freedom. Comments, such as the following, underscored their role as agent of the organization (Davis, 1929).

> The CEO has an obligation to the Board that supersedes any obligation to medical staff (CEO 219).
>
> You are the Board in residence (CEO 122).
>
> I am the agent of the Board, the ultimate authority in the hospital (CO 143).

One CEO offered that the most important knowledge needed by an administrator was "what the Board of Directors expects from its CEO". He later added that although the answer "is somewhat facetious, one's Board will perform one's performance appraisal" (CEO 009), implying that one does what the board expects or faces the prospect of dismissal. In adopting a rather cautious response to the case of suspected medical incompetence, another CEO observed that it is "easier for a Board to obtain a new administrator than a new medical staff" (CEO 100).

Dalton's (1966) concept of coerced freedom is essentially the latitude executives have to choose among workable alternatives in order to find practical means to resolve their moral conflicts. Dalton further described the specific role of manager as being so powerful as to shape those who aspire to such a role. He points out that once an executive takes a position in an organization, he comes

to learn of role involvements, and is sensitized to what appearances he must maintain. Thus, "the organization forces role occupants to assert, but compromise, their innately human purposes" (Dalton, 1966:259). The reality of compromise for the hospital CEO is underscored in the following statement.

> Your medication error question raises an interesting ethical dilemma. I would probably have answered differently earlier in my career, and particularly, before I was a CEO. Is it age or power that corrupts!? (CEO 176)

The limits to freedom in acting on one's moral responsibility to the community, at the expense of institutional status and survival, was also illustrated in response to the second administrative dilemma (the dilemma of resource allocation). One CEO stated that "it is almost impossible to preside at the dissolution of the institution" (CEO 088).

Hall (1969) discussed the particular problems of executives who are school superintendents, city managers or hospital administrators as two-fold. They are in a position of being subservient to an external group who have the power to call for the executive's dismissal. They are also much more subject to pressures of being in the public eye than business executives. In dealing with internal and external environmental pressures, their management of competing interests is the more difficult because goals of their organizations are often multiple, ambiguous, and conflicting. Given these realities, at least outward conformity and compromise are necessary. Statements in the questionnaire underscored the significance of

subservience to external groups with sometimes conflicting interests. Several CEOs identified major problems as:

> Reporting to and being influenced by many masters -- the Board, the Medical Staff, the Minister of Health...(CEO 178).
>
> Having to use persuasion rather than authority (CEO 206).
>
> Hospital resource use is negotiated, not managed due to attitude of volunteer boards and medical staff (CEO 211).
>
> You really are expected to be all things to all people (CEO 194).

The findings of Johnson and Forrest's (1979) study, and Meeks' (1983) study, lend further support to the conclusions derived from the analyses using Larson's criteria in Chapter 2, and to the observation of Hall (1969) and Dalton (1966). In studying roles and relationships of mental health services administrators, Johnson and Forrest found considerable variation in major areas of study but they found a very limited impact of disciplinary background on the administrative role. Explanations offered for this finding were that it was the result of the respondent's long involvement within mental health administration, and that regardless of discipline or degree certain types of persons choose to work in these areas. Although Meeks (1983) found differences in 'career anchors' across CEOs of hospitals in Canada, she was unable to find any distinct career paths for any of the individual anchor groups. She concluded that the status for this occupational group might be so clearly defined that it forces them into the same mode if they want to rise to the top.

It may be that, in this present study, the hospital CEOs' long involvement in health care (median years = 22) and their prior administrative experiences have conditioned them to hold similar views. As Mills (1968) suggested, corporate executives advance to their positions by "fitting-in" with those at the top -- acting like them, looking like them, and thinking like them. Certainly, Meeks' observations suggest that, in this respect, hospital CEOs are not unlike corporate executives. It is also possible that there is selectivity into the administrative role, that is, only certain kinds of individuals pursue an executive position.

In summary, the CEOs studied may demonstrate homogeneity because their organizational role constrains their behavior causing them to conform, they are subject to the pressures of multiple clientele causing them to compromise, and they must "fit-in" with those in senior administrative positions if they want to be successful in competition for a position as chief executive officer. If the premise that the organization shapes both attitudes and behavior has merit, then it is likely to supersede influences of formal education on socialization, and implies very different work variables than those measured in this study, for example, variables such as board composition, medical staff relationships, and ownership may be the more influential variables.

Limited Influence of Education

While the investigator had assumed that diversity of educational background among health executives would provide an ideal study

population in which to trace influences of education on attitudes, other characteristics of this population and of the work setting already described may have offset the effects of such diversity. In addition, it may be that education, in any case, has a very limited influence in the preparation of this organizational professional.

In Chapter 2, limitations of the cognitive base of hospital administration were discussed, as was the lack of standardized educational programs for entry to practice. It is likely that if health administration knowledge is poorly defined and conceptualized, there will be difficulties in the measurement of correlates of occupational role identity, as well as in the interpretation of responses. The lack of standardized education programs would have a similar effect.

Mintzberg (1973) has argued that management science has done little to equip managers to manage.

> Hence those degrees (M.B.A., M.P.A.) can hardly be considered a prerequisite for managing, and the world is full of highly competent managers who have never spent one day in a management course (p.188).

Mintzberg further suggests that management schools have been more "effective at training technocrats to deal with structured problems than managers to deal with unstructured ones" (p.187). Since managing is largely based on dealing with unstructured problems, he maintains that innate skills are the essence of managerial equipment. Based on a study of business and industrial leaders completed a few years prior to the Mintzberg study, Dalton (1966) drew a slightly different conclusion about the role of education. He suggested that increased

years of schooling at the college level was "directly, but complexly, related to managerial skill", but that perhaps the total experience of going to college was more significant than the subject matter taken in gaining experience for dealing with ambiguity, in functioning inside limitations, and in satisficing (p.163).

In the U.S. health services administrator study by Allison, Dowling and Munson (1975:173), executives were asked to identify the best source of competence to perform the various managerial activities. Most executives identified "self" as "the best source of obtaining requisite skills for their position", implying that experience had been their best teacher. These researchers also concluded that educational programs do not contain the crucial variables for the administrative role. They suggest, for example, that health services administrators may denigrate the normative-type management courses they might have had, in which they were taught that "one was first given authority and subsequently expected to be held accountable for only those matters over which he was granted sufficient authority" (p.175). These courses would be at variance with the realities of the job which require an understanding of influence processes and negotiation.

As discussed in Chapter 2, there is a sense in society and amongst managers themselves that success in management does not depend on training. Results of this survey support this notion. When CEOs were asked to state the best preparation for a career as a hospital administrator, responses varied considerably. While the majority agreed that some formal education was important, there was

little agreement on what education was most suitable (see Table 6-1). Since the responses showed rather wide variation, a crosstabulation analysis was done of CEOs with different types of education according to the preparation they recommended for a career in health administration. There seemed to be limited evidence that CEOs simply determined their own educational background to be most appropriate. For example, only 21 out of 86 CEOs with MHA or MHSA degrees specifically suggested an MHA or MHSA degree, and no other correspondence was found between the masters or baccalaurate degree obtained (or diploma or certificate obtained) and the suggested best preparation. It would seem logical that if no clearly identifiable route of entry to practice is suggested by CEOs, they may be stating that their educational background has limited bearing on their attitudes and behaviors.

Comments relative to the question of best preparation for a career in health administration included some of the following:

> I'm tempted to say combat... (CEO 170).
>
> Selling an intangible (like life insurance) (CEO 173).
>
> The mother's knee! (CEO 085).
>
> Sainthood -- failing that, some sort of preparation that develops the ability to effectively manage people in a multi-faceted environment that is highly competitive at times (CEO 044).

One can surmise from these types of comments that the role of hospital administrator, and in particular the role of the hospital CEO, is seen as defying easy answers in respect to best preparation.

TABLE 6-1

RESPONSES OF CEOs REGARDING BEST TYPE OF PREPARATION FOR CAREER AS HOSPITAL ADMINISTRATOR

BEST TYPE OF PREPARATION	PERCENT
Formal Education and Work Experience	17.5%
MHA,MHSA with/without experience	17.5
University HSA with/without experience	8.5
Masters degree in health care/experience	8.1
Health Professional Education/MHA	7.7
Finance/Business with HSA education	7.3
Finance/Business education with experience	6.0
MBA or MHA with experience	5.6
Other	3.8
General Knowledge and experience	3.4
Administration degree with experience	3.0
Experience	2.6
Baccalaurate with experience	2.6
Bachelor's Degree(Humanities)/Experience	2.6
MBA with experience	2.1
Health Professional Education/Experience	1.3
Bachelor's Degree Commerce	0.4
NO RESPONSE	2.6
TOTAL	100.0

It seems unlikely that there would be many other occupational groups sharing this dilemma of such lack of agreement on a definition of preparation for entry to practice.

Therefore, it is likely that disciplinary background may have little relevance to the attitudes of hospital CEOs. As organizational professionals they are not only subject to the constraints of their position but the nature of their formal education program has limited correlation with their occupational role identity. In addition, a certain amount of selectivity into the occupation/profession may make educational influences largely irrelevant. These features of the CEO role tend to produce similar perceptions among this group.

PROBLEMS OF MEASUREMENT

As discussed in Chapter 4, attempts were made to refine the measurement of the occupational role identity scales by careful assessment and elimination of those items which seemed to have either limited variability or lack of clarity. Given this systematic refinement, one might argue that the major problems of measurement were rectified. However, three related problems of measurement merit further attention. These include a potentially inappropriate use of the sub-scales, based on the findings of other researchers who have used Hall's scale; problems of survey questionnaires relative to this particular population; and limitations imposed by quantitative research.

Use of Hall's Sub-Scales

Hall (1968) developed the Occupational Inventory scale for a comparative study of eleven different occupational groups focusing on the degree of professionalism and its relationship to bureaucratic organizations. In subsequent use, Snizek (1972) refined Hall's scale to study engineers, physicists and chemists. It is quite likely that these scales are most powerful and sensitive for the comparison of differences between groups rather than within groups.

Further evidence for this observation is contained in the findings of the study of occupational therapists by Bell and Bell (1972). Responses to two out of the five professional dimensions (Belief in Service to the Public and Sense of Calling) were found to have little or no variation; further, scores were consistently high, leading the authors to conclude that these were generalized dimensions for occupational therapists. The reader will recall that similar problems were encountered on two dimensions in this study being reported, leading to elimination of those dimensions. Likewise, in the Monning (1978) study, the more significant finding was the comparison between nurses and physicians, since few significant differences were found within each group. In short, Hall's sub-scales appear to be more appropriate to comparative study of different types of occupational groups.

Problems of a Survey Questionnaire

A second problem of measurement is the problem of using a survey questionnaire as the means of data collection for this particular

occupational group. Mintzberg (1973) characterized the job of the manager as one in which the work is open-ended. Since the workload is exceptionally heavy and proceeds at an unrelenting pace, the manager's "work activities are characterized by brevity, variety and fragmentation" (p.5). Mintzberg suggested that a "prime occupational hazard of the manager is superficiality" (p.5). This means that the task of management does not foster reflective planners, but rather individuals accustomed to operating in a stimulus-response milieu.

The accuracy of Mintzberg's observations are borne out in additional comments on the questionnaire such as the following:

> Doing this excercise gave me an opportunity for reflection -- an interesting task these days when so many other issues take priority (CEO 217).

> Your questionnaire really made me think of why I am in this profession (CEO 196).

> This was an interesting questionnaire which was very thought-provoking (CEO 109).

If, as Mintzberg suggested, the manager's superficial treatment of issues is a result of his or her constant awareness of the opportunity cost involved in choosing to attend to one task rather than another, this occupational group might (more than others) require an interviewer to be present to slow the pace, command time, and probe to get beyond superficial answers. That many of these questionnaires were completed in haste is apparent from the following comments.

> I am sorry to have been so rushed that I could not fill this out more completely. P.S. Four detailed surveys arrived this month (CEO 177).

> Sorry, some of my answers could have been explained more clearly but time ran out (CEO 232).

On the other hand, the researcher was overwhelmed by the time and attention given to answers on the open-ended questions and the administrative dilemmas by the majority of CEOs. In only a few cases could one argue that these sections of the questionnaire had received superficial treatment. Thus, the actual effects of this potential measurement problem in relation to the attitude scales are difficult to assess.

Limitations of Quantitative Research

A third problem of measurement is that subsumed under the limitations of quantitative research itself. A number of these limitations were also identified in comments, examples of which are provided below.

> Answers to questions could be discussed at length. I am not sure the short questions and answers are of great value (CEO 188).

> I anticipate that tabulation of these may result in some degree of contradiction in opinion expressed because of the intentional structuring of questions (CEO 140).

These comments suggest that important dimensions of occupational role identity might not have been tapped in this study because the theoretical structure and the mode of inquiry did not allow for other, and potentially more relevant, answers. Astley (1985) has pointed out that researchers with different world views impose different meanings and interpretations on data. The reporting of the

results of this study are likely no exception to this reality. In the same way, it is quite likely that respondents have placed different meanings on the questions asked, and that even their answers to the questions may have very different meanings for them. This would be particularly true in regards to the open-ended questions. Even the listing of major responsibilities of planning, organizing, staffing, directing, coordinating, etc. may, for example, have very different meanings for different respondents. For some it may be a straight reiteration of the textbook acronym or their written job description; whereas for others it may be a set of very meaningful and powerful concepts. Here, again, the limitation of a well-defined cognitive base for hospital administration and the lack of a commonly understood vocabulary are evident. For these reasons, the quantitative approach to this study may have seriously limited the exploration of occupational role identity resulting in the negligible findings.

THE NEED TO RECONSIDER THE THEORETICAL ORIENTATION

It is not uncommon for theories to prevail even amidst mounting evidence of their inability to predict empirical findings. This tendency to ignore disconfirming evidence occurs when ideas are congenial and support preferred biases (Astle, 1985). The theoretical position underlying this study may be one such theory which has continued to be supported because it appears so eminently logical and appealing, particularly to educators. That extensive

professional' education would produce no enduring attitudes and values is a rather unpalatable proposition to ponder.

Yet, there appears to be mounting evidence that the theory linking formal education to professional role identity is not supported. Monning (1978) found few significant differences between different levels of education in nursing and professional dimensions except in Use of the Professional Organization as a Major Referrent and in Sense of Calling. Nurses with masters degrees demonstrated higher professionalism in Use of the Professional Organization as a Major Referrant. Contrary to expectations, diploma nurses had a greater Sense of Calling to the Field than baccalaureate and master's graduates. She found no significant differences on four of the five professional scales across educational groups of physicians. Only physicians with Ph.D.'s indicated a higher use of professional organizations when compared to M.D.'s. These results had also been found in the study of occupational therapists by Bell and Bell (1972), where variables such as age, marital status and work setting tended to produce greater explanatory power than education and years of work experience. Donner's (1986:72) study of the relationship of work setting to the professional socialization of nurses also concluded that the research was unable to "identify educational preparation as a significant variable contributing to nurses' professionalism". Rather than highlighting education, Donner found that the work setting was significant for professional autonomy.

Moving away from studies which have used a similar measurement instrument (i.e. Hall's Occupational Inventory Scale) to those using

different approaches to measurement, the lack of findings of relationships between education and length of work experience and professional role identity are similar. As noted in Chapter 1, many studies of occupational/professional socialization have concentrated on students rather than practitioners. Two studies focusing on correlates of professional values and attitudes of practitioners (or 'finished' graduate professsionals) are those by Lurie (1981) on nurse practitioners, and by Chappell and Colwill (1981) on physicians.

In the former longitudinal study, successive cohorts of nurse practitioner program graduates, who were working in various settings, were analyzed through self-report data, interviews and observations. Lurie found that role socialization for some aspects of the nurse practitioner role (mainly areas of skill) occurred both as a result of the training program and through interactions with the work setting; while for other aspects (such as psychosocial counselling), the structure of the work situation counteracted program socialization. On the dimension of clinical autonomy and collegial relationships with physicians, for example, "structural and situational constraints of the work setting were more powerful than the professional socialization of the program" (p.45). Lurie concluded that for those nurse practitioners for whom the attitudes and skills developed in the training program were personally compatible, ways and means were found to use many of them despite constraints imposed by the work setting. At the same time, working conditions could be only partially determined by the nurse

practitioner's own efforts and negotiations. Thus, she concluded that work setting was a more powerful determinant of socialization.

> In brief, professionals first learn what makes them professional and what being a professional is supposed to be. Then they learn the way things are. Finally, they may accede to the way things are; or they may attempt to make the way professionals and things are supposed to be and the way they are as congruent as possible. Personal propensity will determine whether that latter venture is undertaken, and the power structure of employment will determine whether or not it will be successful (pp. 46-47).

The study reported by Chappell and Colwill (1981) attempted to compare three different models of professional socialization (social origins of recruits, medical school as agent of socialization, and situational factors in work environment) as they affect career attitudes. The authors concluded that medical schools may be important agents of socialization for some professional attitudes but not for others.

The theory of correlates of an organizational role identity on which this study is based may also be problematic, at least in regards to the independent variables measured in the study. Angle and Perry (1983) have described two general models of organizational identification or commitment. One is that the locus of organizational commitment resides in the attitudes and attributes of the individual, including his or her level of educational preparation. The other is that organizational identification or commitment is a function of how well the organization fulfills important needs of the individual so that a process of reciprocation or exchange is set in motion. The work variables selected for this

study focusing on length of work experience were too limited to tap the important differences of the employment setting and situation. It is clear from the extended analyses reported in the previous chapter that size of hospital and type of hospital may be significant variables. There are likely other work setting variables which affect the hospital CEO's role identity, such as hospital ownership, board composition, medical staff relations, governmental pressures, community politics, relationships with other CEOs, etc., since the expectations imposed through these variables are likely to have a more powerful influence on occupational role identity than is educational background.

Careful study of the administrative dilemmas confirms the importance of structural and situational factors of the work setting in influencing attitudes and decision-making. For example, in the administrative dilemma in which occupancy rates on a particular in patient service had dramatically declined, there was a tendency for CEOs in Quebec and Ontario to take a more definitive position, with several indicating that they had already faced the situation and had closed a service (e.g., CEO 154). In the administrative dilemma of suspected medical staff incompetence, many CEOs indicated they had dealt with such a situation, others referred to bylaws in place to deal with the problem, and still others wrote cautionary advice (based on their experience) that criticism of medical practitioners by their colleagues "is often encountered for medical-political reasons" and cannot be taken at face value (CEO 073). In the case of the medication error, it was clear that previous encounters (or the

apprehension of encounters) with the media or with legal suit dominated the decision-making.

Thus, it would seem that work variables might well be critical in explaining occupational role identity. What is needed is a theory that explains both how an occupational role identity forms over time and how work settings come to have a homogenizing effect. Since role identity may alter over time, longitudinal study would be required to identify "source and sequence" (Laurie, 1981) of correlates of an occupational role identity. And since the similarity of work experiences of hospital CEOs may well explain the similarity of their responses, and their occupational role identities, an adequate theory must explain the homogenizing effect of work experience. In other words, while one often starts out to explain variation, it may be more important, in this case, to explain a lack of variation. It may be more important to explain how different individuals with different backgrounds and different education come to act in similar fashion and to view their work in similar perspective.

Limitations of the Occupational Role Identity Model

One further explanation for the limited findings is a direct function of the occupational role identity model utilized in the study. Given that the investigator set out to develop nine dimensions of occupational role identity, which were determined to be essentially independent of each other, limited findings might have been predictable. If the dimensions are, in fact, independent of each other, the independent variables which would correlate with each

dimension must also be independent. This means that each independent variable could explain significant variance on one dependent variable only. And since the effect of the types of education may be quite similar and the various lengths of work experience may also have a similar effect, the overall effect may have been an even more limited number of independent variables compared to the nine dependent variables, i.e., the dimensions of occupational role identity. Hence, the small number of significant predictors could not explain the nine dimensions.

CHAPTER SUMMARY AND CONCLUSIONS

In this chapter, three possible explanations for the limited survey findings are presented. Contrary to the researcher's supposition, hospital administrators were not an ideal group to study for purposes of finding correlations between occupational role identity and education and work experience variables. First, CEOs are a surprisingly homogeneous group leading one to speculate that the employing organization may itself shape attitudes, and that there may be a very limited influence of education on occupational role identity. Further, while work appears to be a key explanatory variable, it explains similarity, not differences (and differences initially were the focus of this research).

A second possible set of explanations for the failure of this study to support the initial hypotheses revolves around problems of measurement. Some of these concern the fact that the subscales were not used to compare across occupational groups, for which purpose

they were designed, but were used rather to compare within one selected group. Other problems relate to the use of a survey questionnaire with this particular population, and the limitations of quantitative research. That is, this particular group may respond superficially to the questionnaire due to pressures of time, and the mail-out questionnaire does not allow for probing for depth in answers. This latter limitation also precludes exploration of different meanings and interpretations of both questions and answers.

Finally, another possible explanation for the limited findings is that the theory itself is untenable. When findings of other studies and the results of this present study are compared, there appears to be mounting evidence for this third explanation. However, given the potential problems identified relative to the choice of study population and the limitations of measurement, the most that can be concluded based on this study is that the theory is too limited to explain the complex etiological process of occupational socialization of hospital CEOs, and that a more productive focus would be on the homogenizing processes of work setting and experience on this occupational group.

CHAPTER 7

SUMMARY, CONCLUSION AND RECOMMENDATIONS

SUMMARY

The purpose of this study has been to examine the relative influence of education and work experience on an occupational role identity, and to assess the degree of compatibility between a professional role identity and an organizational role identity. The occupational group selected for the study was hospital administrators, who were thought to provide an ideal study population, since they have diverse educational and experiential backgrounds and they have been involved in taking steps towards professionalization in Canada since the late 1960's. Further, hospital CEOs are a type of organizational professional (a professional necessitated by the increasing managerial functions required by the expansion of health care bureaucracies) on whom limited research has been conducted.

As discussed in Chapter 1, literature was reviewed in three main content areas: formal education and the development of a professional role identity, work experience and the development of an organizational role identity, and professional and organizational value conflicts. Also reviewed were major studies of health and hospital administrators in the United States and Canada. This latter review identified the relative paucity of theory-based research on hospital administrators.

In order to contextualize hospital administration as a professionalizing occupation in Canada, Larson's (1977) framework for evaluating the social resources available to hospital administrators in their occupational development was employed in Chapter 2. This permitted a broader assessment of the structural supports of this occupational group, such as being a full-time occupation, forming a professional assocation, having a code of ethics, etc., as well as the broader social supports.

Attention was then directed toward the study of occupational role identity (attitudinal attributes) of hospital administrators. Based on role identity theory, a set of dependent variables called dimensions of occupational role identity was measured and analyzed with the hypothesized explanatory variables of education and work experience. Five of the nine dimensions of occupational role identity measured were Use of the Professional Organization as a Major Referrent, Belief in Service to the Public, Belief in Self Regulation, Sense of Calling and Feeling of Autonomy. These were all based on Hall's (1968) Professional Inventory scales. The other four role identity dimensions included Organizational Commitment, Organizational Immobility, Reactive Position (all organizational role identity dimensions) and Proactive Position, which measures were derived from other subscales in use, and from the researcher's subjective judgment based on the literature. The three items which comprised each dimension were scored on a seven point Likert-type scale. Education was measured by total months of education and by type of education. Work experience was measured by years in present

hospital, years in health care, number of organizations worked for and years in present position. A number of hypotheses were developed relative to education and work experience correlates of a role identity. It was hypothesized that:

1. Length of education is positively related to a professional role identity.
2. Length of education is negatively related to an organizational role identity.
3. Increased work experience is positively related to an organizational role identity.
4. Increased work experience is negatively related to a professional role identity.
5. Increased work experience reduces the effect of education on a professional role identity.
6. Organizational role identity and professional role identity are negatively related.

An exploratory factor analysis to assess construct validity resulted in a nine factor solution accounting for 60.7% of variance explained. Five of the theoretical constructs (dimensions) were supported (Use of Professional Organization as a Major Referrent, Belief in Service to the Public, Belief in Self Regulation, Sense of Calling and Proactive Position). Two dimensions (Organizational Immobility and Reactive Position) collapsed into one to comprise a dimension re-titled Organizational Loyalty, and two other dimensions fractured into three. These latter dimensions were Sense of Autonomy and Organizational Commitment which created some new combinations

termed by this investigator Circumscribed Autonomy, Professional Autonomy, and a redefined Organizational Commitment.

The total population of chief executive officers in English language hospitals of over one hundred beds in Canada, as listed in the Canadian Hospital Directory (1986), was chosen as the study population (N=361). Data was collected during the period January 1 to April 15, 1987 by three separate mailings. First, the questionnaire was sent out with a covering letter. This was followed by a reminder letter, and then a second questionnaire with a second reminder letter. An overall response rate of 72% was obtained with satisfactory response rates across all provinces. Comparison of respondents and non-respondents showed no significant differences by province or by size of hospital, although there may have been an over-representation of respondents who were members of the Canadian College of Health Service Executives.

Characteristics of respondents showed a well-educated group with various single or combined backgrounds, specifically: 55% holding Master's degrees (38.5% with an M.H.S.A. degree or equivalent), 72.5% holding bachelor's degrees, 24% holding one or more health professional qualifications (M.D., R.N., R.T., etc.) and 11.2% holding an accounting credential. Respondents also indicated considerable health care experience (average 22.5 years' experience in health care) and a respectable amount of health care administration experience prior to their present appointment. The majority of CEOs (65%) work in acute care hospitals and 46% are in hospitals whose rated bed size is between 100 and 250 beds. These

CEOs range in age from 30 to 68 with an average age of 49 (median 49, mode 42). Eighty-three percent are male, 82.5% are married and 59% have dependent children.

Using both the nine factor generated indexes of dimensions of occupational role identity, and the top items in each index as dependent variables, the dimensions of occupational role identity were regressed on education and work experience variables. As this analysis failed to indicate any strong linear relationships, it was decided to re-examine the subscales to eliminate items with limited variance and/or other manifest limitations, with the intent to improve the measurement. A subsequent elimination of items resulted in removal of four entire indexes (Use of Professional Organization as Major Referrent, Belief in Service to the Public, Proactive Position and Organizational Commitment) mainly due to limited variability. CEOs showed consistently high agreement with these attitudes, particularly the first three dimensions. Two of the indexes emerged unchanged (Belief in Self-Regulation and Organizational Loyalty), and two indexes were modified (Sense of Calling and Circumscribed Autonomy). The final dimension (Feeling of Autonomy) was narrowed down to a single item. These five dimensions explained 63.3% of variance.

A variety of statistical techniques was employed to search for correlations between these five organizational role identity dimensions and education and work variables. Although there were no strong linear relationships apparent (based on multiple regression analysis), there was some evidence of complex interactions (based on

analysis of variance), particularly when demographic variables (age, sex, marital status, gender, etc.) and hospital size were included in the analyses. Thus, the hypotheses based on a simple linear model were rejected for lack of conclusive evidence.

Possible explanations for the findings of limited and/or no correlations were then explored. One reason offered was that there was a high degree of homogeneity in the attitudinal orientations of the population chosen for the study. Findings to this effect were presented in Chapter 5. This homogeneity may have precluded the education and the work variables from having a measureable effect on the attitudes studied. In Chapter 6, reasons for this homogeneity were suggested, namely, that there is a likelihood that the organization shapes attitudes and behaviors and that education may, therefore, have a limited influence on this occupational group. Further, it was suggested that, despite efforts to improve measurement, problems remained with the use of Hall's sub-scales on a single group since these scales may be more effective in assessing differences between groups rather than within group differences. Problems of mailed survey questionnaires (specifically a lack of opportunity to probe for more depth in responses) and limitations imposed by quantitative research (including the structuring of questions which may fail to tap more important dimensions of occupational role identity) were other possible explanations discussed. Finally, it was suggested that the theoretical orientation underlying the study needs serious re-consideration. Linear additive models would appear to be an inadequate bases for

adequately capturing and interpreting the complex relationships among demographic, education and work variables, personal traits, etc. and occupational role identities. Further, a cross-sectional research design does not permit assessment of the process by which an occupational role identity is formed. This study suggests that the similarity of the work experiences and settings experienced by various hospital CEOs may have the consequence of making hospital CEOs similar in the attitudes that they express regarding their occupational role identities.

CONCLUSIONS

This study set out to examine the correlates of the role identity of an organizational professional, using hospital administrators as the study population. It seems evident from the preceding analyses that simple linear models using length and type of education, and length of work experience and number of organizations as correlates of an occupational role identity do not explain the occupational socialization of this organizational professional. Rather, in the case of the hospital CEO at least, it appears that there is a complex process of socialization which occurs largely in the work setting such that work experience moulds diverse individuals into very similar administrators. It may be that the constant pressures for action, over a period of time "shape the general perspectives of the bureaucratic intellectual" (Merton, 1957a:218). This shaping may result in a tendency to confine the administrator's attention to instrumental means to implement policies within the context of the

organization. With this more narrowed focus in the discharge of their duties, attitudes (including those of occupational role identity) are likely to be similar.

However, having presented the case for homogeneity, it is important to recognize the heterogeneity within this occupational group. Even though it was not possible to find systematic differences in education or work experience that would explain why the CEOs varied on dimensions of occupational role identity, the fact remains that there was variation on the five indexes and the items. Undoubtedly, the population studied is far more heterogeneous than the study has shown. This suggests that some critical differences in orientations were not among the dimensions measured. For example, differences would likely be found in cosmopolitan as opposed to local orientations which were not captured in the proactive and reactive dimensions developed. There are also likely to be differences in attitudes relative to propensity for risk-taking, degree of liberalism, saliency of humanism, and others. Predictors of these differences might include such variables as family background, parents' occupations, religion, and political affiliations.

Another conclusion of the study is that there is a lack of evidence to support the hypothesis that organizational role identity and professional role identity are negatively related. Indeed, it appears that these organizational professionals manifest aspects of both professional and organizational role identities without obvious perceived difficulty. In this respect, this organizational professional (the hospital administrator) might best be described as

the "specialist bureaucrat" ideal type suggested by Reissman (1949). This individual has professional orientations, but exhibits an equal or greater awareness of identification with the bureaucracy, which prescribes the way in which one "gets ahead" in the profession.

These hospital administrators score high on their attitudes regarding the importance of professional associations as major referrents, their belief in self-regulation and their sense of calling to the field. In this respect the professional associations (e.g., CCHSE, ACHE) may themselves have played a pivotal role in shaping these professional attitudes and, in a sense, defining the profession. These administrators also score high on another professional dimension, that of Proactive Position, although there is some indication that this proactive posture may be the socially desirable response. Their sense of autonomy, a key characteristic of the professional model, seems to be of two distinct types. There is the sense of autonomy described by the item "there is real autonomy in the work of the CEO". This type of autonomy seems to fit the practitioner's feeling that he or she ought to be able to make decisions without external pressures from clients or the employing organization, and is in keeping with a professional autonomy. There is also the sense of autonomy in which the administrators feel there is opportunity to exercise their own judgment and that they agree with the Board's policies on important matters related to program priorities. This Circumscribed Autonomy underscores the realities of the role of the CEO as agent of the board, and represents an organizational role identity. There is also evidence of

Organizational Loyalty, which comprises personal reasons (side-bets) to stay with the present organization and a willingness to confine one's efforts to implement the policies defined by the Board. In this sense, these CEOs may see themselves as largely responsible for finding alternative ways of implementing the goals defined by others (Merton 1957a).

These organizational role identities seem to reflect the limitations of the professional model in accommodating this type (the managerial type) of organizational professional. According to that model, these professionals have many structural attributes of professionalism in place. Yet, they lack a sufficiency of other significant social resources necessary for professionalism. For hospital administrators, in particular, the lack of a specialized and systematic knowledge base, the lack of a clear and specific clientele, the lack of a standardized training program for entry to practice, and the circumscribed power and authority characteristic of their role, pose significant barriers to professionalism. Further, these organizational professionals cannot overcome many of the situational obstacles of their role. In this sense, according to the professional model, hospital administration might be defined as a "truncated" profession. This implies an occupational group falling permanently short of attaining professionalism.

Such a categorization would seem to imply some short-coming relative to hospital administrators. However, one might argue that the problem rests with a narrow, time and culture-bound model of professionalism. What is needed for managerial professionals is a

modification of the professional model which allows for organizational determinants to appropriately replace certain social structural attributes more characteristic of the "free" professional. For example, the dimension of a circumscribed autonomy is clearly antithetical to the autonomy which should characterize the "free" (independent) professional. Yet, a circumscribed autonomy would seem to be entirely appropriate to the social role of the executive since "the fundamental responsibility of management is to maintain the organization in a state of health necessary to carry on its work" (Buchanan, 1974:533). Thus, a model which acknowledges that both classical professional role identities and organizational role identities may be integrated in a legitimate model of professionalism is required.

If different types of professional models were developed, it might be possible to hypothesize the conditions under which formal education and work experience would influence occupational role identities differentially. For example, it might be hypothesized that in instances where there is early institutionalization of a profession (e.g., in developing countries), education will have a dominant influence on the occupational role identity of the practitioner. Or, in the case of hospital administrators, it might be hypothesized that hospital administrators at lower levels of administration in the hospital hierarchy, such as vice presidents of finance or directors of nursing, would evidence a greater influence of education on their occupational role identity than that evidenced by chief executive officers. Such theorizing could result in a more

specific and a more sensitive approach to research on the professions.

In the final analysis, to the extent that it is possible to suggest that the empirical findings are valid, and that the theory underlying the original hypotheses is untenable (despite the measurement limitations cited), a major contribution of this research must rest in the disconfirming evidence provided in the study. Popper (1963:vii) has stated that "refutation of a theory is a step forward that takes us nearer the truth", since disconfirmation leads to a new range of conjectures. The findings of this study cast serious doubt, not only on the theoretical orientation, i.e., the general thesis regarding the relationship of education and occupational role identity, but also on the utility of a set of scales commonly misused. It is with these "refutations" in mind that the following recommendations are offered.

RECOMMENDATIONS

Based on the finding of this study, the following recommendations are offered for further research.

1. Recommendations for theoretical development.
   a) Attention should be given to developing different types of professional models which, in addition to contextualizing an occupational group relative to time, culture, social structure, etc. would allow for legitimate variations

according to type of setting, focus of delivery, etc. These models should include a type for organizational professionals, particularly managerial professionals.

b) Attention should also be directed toward developing broader theoretical models of professional socialization which would include a range of personal, organizational, demographic and educational variables.

2. Recommendations for research.

a) Research should be directed toward testing the above theoretical models.

b) In modelling occupational role identity for future research, careful attention must be given to the number of dimensions of occupational role identity relative to the number of predictors measured.

c) Research designed to identify correlates of occupational role identity (i) should focus on process, i.e., the way in which incumbents are socialized into their occupational role and how that socialization may change over time, (ii) should be designed to measure similarity as well as diversity in occupational role identities, (iii) should use a semi-structured and/or unstructured interview as a preferred mode of inquiry, and (iv) should develop professional occupational inventory subscales that are specific to the single occupational group under study and which are designed

to identify intragroup differences. (Hall's subscales are more effective for comparison across occupational groups.)

3. Recommendation for education of health service executives.
   a) Attention should be directed toward a more comprehensive definition of the knowledge base of health service executives.

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APPENDIX A

QUESTIONNAIRE

HOSPITAL CHIEF EXECUTIVE OFFICER QUESTIONNAIRE

This questionnaire is designed to determine how hospital chief executive officers (CEO's) see themselves in relation to their occupation and to determine what factors might influence their attitudes.

ALL RESPONSES WILL BE TREATED IN STRICT CONFIDENCE: NO RESPONDENT WILL BE IDENTIFIABLE TO THE RESEARCHER.

All names and addresses of the CEO's were taken from the Canadian Hospital Directory; 1986 edition. **HOSPITAL** has been used throughout the questionnaire as a generic term to include all health care facilities over 100 beds as listed in the Canadian Hospital Directory.

The questionnaire is comprised of 6 sections:

I. Work Experience and Occupational Associations

II. Educational Attainments and Activities

III. Role of the Hospital Chief Executive Officer

IV. Attitudes

V. Administrative Dilemmas

VI. Personal Information

Should you have any queries about this questionnaire please don't hesitate to call me (Professor Janet Storch) at (403) 432-6416 (office) or at (403) 434-9843 (home).

SECTION I. WORK EXPERIENCE AND OCCUPATIONAL ASSOCIATIONS

1. How many years have you been:

   a) employed by your present hospital? _____ yrs.

   b) employed in the health care field (total yrs) _____ yrs.

2. Please indicate the number of health agencies/organizations for which you have worked, including your present agency. ____ organizations

3. Please indicate the Province in which your hospital is located

   _____

4. Please provide further information on your career by indicating the last five positions you have held (health related or otherwise), beginning with your present position.

	POSITION TITLE	TYPE OF ORGANIZATION	
Presently held			19__ to present
Previously held			19__ to 19__
Previously held			19__ to 19__
Previously held			19__ to 19__
Previously held			19__ to 19__

5. Current Facility

   a. Rated bed size of your hospital
   - ___ 100-249 beds
   - ___ 250-499 beds
   - ___ 500-749 beds
   - ___ over 750 beds

   b. Type of Facility (based on majority of beds)
   - ___ acute care general hospital
   - ___ pediatric hospital
   - ___ maternity hospital
   - ___ psychiatric facility
   - ___ chronic hospital
   - ___ convalescent hospital
   - ___ rehabilitation facility
   - ___ extended care facility
   - ___ mentally handicapped facility
   - ___ other _____

   c. Is your hospital classified as a teaching hospital in the CHA Directory?
   ___ Yes ___ No

6. Occupational Associations

   Please list the occupational/professional associations in which you have a personal membership

   _____

   _____

   _____

   _____

   _____

   _____

   _____

   _____

   _____

SECTION II. EDUCATIONAL ATTAINMENTS AND ACTIVITIES

7. In the spaces below, please provide the information requested regarding educational qualifications attained. (Note: State number of years of study towards each qualification in full-time academic years.)

Degree, Diploma Certificate	Area of Study/ Content of Course	Year Awarded	Institution Awarding	No. of Years of Study

(Use back of this page if more space is required)

8. Are you actively working toward a qualification (or further qualification) in administration/health administration?

Yes ___ No ___

9. Do you plan to further your formal health services administration education in the next five years?

Yes, definite plans ___

No, no plans ___

Uncertain ___

10. How many educational conferences or workshops relevant to health administration (but not counting hospital association conventions) have you attended in the past two years?

None ___

1-3 ___

4-6 ___

more than 6 ___

SECTION III. THE ROLE OF THE HOSPITAL CHIEF EXECUTIVE OFFICER

11. What do you/would you tell a person interested in a career in hospital administration about the following:

a) the major responsibilities of the hospital chief executive officer

b) the major problems/frustrations of being a hospital CEO

c) the most important knowledge a hospital CEO must have (i.e. what do you need to know to do your job well?)

d) the best type of preparation for a career as a hospital administrator

12. Why did you enter a career in hospital administration?

_____

_____

13. In what way(s), if any, have you revised your initial expectations about hospital administration as a career? and why? _____

_____

_____

14. What are the POSITIONS of the most significant persons to whom you relate in doing your work as chief executive officer?

a) Inside your hospital

_____

_____

_____

b) Outside your hospital

_____

_____

_____

SECTION IV. ATTITUDES

The following set of statements is designed to determine how you see yourself as a hospital administrator and how you view your occupation. Please circle ONE of the seven possible responses to indicate the extent of your agreement or disagreement with each of the following statements on a scale of 1-7 where 1 = Strongly Disagree, 7 = Strongly Agree and 4 = No position on the statement.

	Strongly Disagree						Strongly Agree
15. My main responsibility as a hospital CEO is to stay within the budget of my hospital.	1	2	3	4	5	6	7
16. I make my own decisions in regard to what is to be done in my work.	1	2	3	4	5	6	7
17. I find that my values and the values implicit in the policies of the hospital in which I work are very similar.	1	2	3	4	5	6	7
18. People, in general, do not realize the important role that hospital administrators fill in society.	1	2	3	4	5	6	7
19. The majority of hospital CEO's are in this occupation because it offers relatively high status with reasonable pay.	1	2	3	4	5	6	7
20. I believe hospital CEO's should have an individual membership in an occupational/professional association of health administrators.	1	2	3	4	5	6	7
21. My fellow hospital CEO's have a pretty good idea about each other's competence.	1	2	3	4	5	6	7
22. I will likely remain in my present position for some time due to personal circumstances rather than for professional reasons.	1	2	3	4	5	6	7
23. Most hospital CEO's have a real sense of dedication to their work.	1	2	3	4	5	6	7
24. I believe it is my job to confine my efforts to implementing policies defined by the Board.	1	2	3	4	5	6	7
25. I feel I have little opportunity to exercise my own judgement in my position.	1	2	3	4	5	6	7
26. It is encouraging to see the high level of idealism which is maintained by most hospital CEO's.	1	2	3	4	5	6	7
27. I think health care administrators as an occupational group are essential to society.	1	2	3	4	5	6	7

SECTION IV: continued

	Strongly Disagree						Strongly Agree
28. I regularly attend meetings of the professional association(s) for health administrators.	1	2	3	4	5	6	7
29. As a hospital CEO, I have a key role to play in initiating change in the health care system.	1	2	3	4	5	6	7
30. I routinely read the major health/hospital administration journals.	1	2	3	4	5	6	7
31. A very important thing to me at this stage of my life is to have stability of employment.	1	2	3	4	5	6	7
32. There is little real autonomy in the work of the hospital CEO.	1	2	3	4	5	6	7
33. My colleagues from other hospitals know pretty well how effective I am in my job.	1	2	3	4	5	6	7
34. The functioning of the health system would be seriously impaired if there were no health care administrators.	1	2	3	4	5	6	7
35. I believe it is important to put the interests of the hospital in which I work above everything else.	1	2	3	4	5	6	7
36. As a hospital CEO, I should be actively involved in developing health care policy.	1	2	3	4	5	6	7
37. The particular knowledge and skills I have developed in my present position would not easily be transferable to another health facility.	1	2	3	4	5	6	7
38. Often I find it hard to agree with the Board's policies on important matters related to program priorities.	1	2	3	4	5	6	7
39. I can be most effective in my job if the Board provides me with clear directives.	1	2	3	4	5	6	7
40. It is difficult for me to judge the competence of other hospital CEO's.	1	2	3	4	5	6	7
41. I believe it is my responsibility to evolve ways and means of of reminding the Board and the Medical Staff that this hospital is here to serve the good of the public.	1	2	3	4	5	6	7

SECTION V. ADMINISTRATIVE DILEMMAS

In this section three administrative dilemmas are presented. Please consider each of the dilemmas below and state: (a) a COURSE OF ACTION you would take and (b) the REASON WHY you would take that action. (Use back of this page if more space is required)

42. Due to a nursing medication error a patient's recovery has been delayed approximately a week, but the patient will otherwise experience no long term effects. The patient concerned happens to be a close relative of a local newsman who has been highly critical of the hospital for a number of years. You are aware that the patient and the family have been told that the patient's set-back was due to an unanticipated drug reaction and that they seem satisfied with that explanation. Any adverse publicity for your hospital could be damaging at this point in time.
WHAT WOULD YOU DO AND WHY?
a) Course of Action:

b) Reason:

43. Due to population and illness rate changes in your community, one of the in-patient services in your hospital has experienced a dramatic decline in occupancy rate over the past three years. It is clear that other hospitals in close proximity could adequately meet the needs of the community for this service. You know it makes sense in every way to discontinue the service but institutional politics are opposed to such a loss. By maintaining this program, other programs in your hospital are less able to meet their service demands and quality of care on those units has suffered as a result.
WHAT WOULD YOU DO AND WHY?
a) Course of action:

b) Reason:

44. At a meeting of the Medical Advisory Committee (MAC) convened to receive recommendations on annual medical staff re-appointments, you learn that a physician on staff is being recommended for re-appointment despite the fact that he has been criticized by the majority of his colleagues for unethical conduct and general incompetence. The MAC agrees to support the recommendation for re-appointment to the Board.
WHAT WOULD YOU DO AND WHY?
a) Course of action:

b) Reason:

SECTION VI. PERSONAL INFORMATION

45. Please indicate:

a) Present age ___ years

b) Gender ___ male
___ female

c) Marital status ___ single (never married)
___ married or commonlaw
___ other

d) Dependent Children ___ yes
___ no.

46. Please use the remaining space to add any comments you wish, or to explain any of your answers.

THANK YOU FOR YOUR ASSISTANCE
PLEASE RETURN THE COMPLETED QUESTIONNAIRE IN THE ENCLOSED ENVELOPE TO:

Ms. Mary Peace, Receptionist
c/o Storch Executive Survey
Department of Sociology
5-21 Tory Building
University of Alberta
Edmonton, Alberta
T6G 2H4

APPENDIX B

LETTERS TO HOSPITAL CHIEF EXECUTIVE OFFICERS

University of Alberta
Edmonton
Canada T6G 2H4

Department of Sociology
Faculty of Arts
5-21 HM Tory Building, Telephone (403) 432-5234

January 1987

<name>
<addr>

Dear Chief Executive Officer:

I am an Associate Professor in the Department of Health Services Administration and Community Medicine working towards my doctoral degree. I would appreciate your help in providing information for my dissertation research which entails a survey of chief executive officers of health facilities in Canada.

The purpose of the study is to explore how hospital administrators see themselves in relation to their occupation, and how their work experience and their education influence their attitudes. Since there are very few studies specific to hospital administrators in Canada, the findings of this attitude survey should be of interest to practicing hospital administrators and other health executives.

Should you be willing to participate in this survey, please complete the attached questionnaire and return it in the enclosed self-addressed envelope by January 31, 1987. It should take approximately 30 minutes to complete. Please be candid in your responses: there are no right or wrong answers.

All replies will be kept confidential. Your return envelope has been assigned a number only for the purpose of following up non-respondents. The envelope with your completed questionnaire will be opened by a secretary who will separate the envelopes from the questionnaires before giving them to me. Thus, at no time will individual respondents be identifiable to me. Answers to the questionnaire will be reported in terms of statistical summaries. In addition, selected quotations might be used from Sections III and V.

As a way of showing my appreciation for your assistance in this study, I will ensure that a summary of the study results are mailed, via the secretary, to all those who participated in the survey.

Thank-you in advance for your consideration of my request.

Sincerely yours,

Janet L. Storch, R.N., M.H.S.A.
Doctoral candidate, Department of Sociology,
and Associate Professor, Department of Health
Services Administration and Community Medicine,
University of Alberta

University of Alberta
Edmonton
Canada T6G 2H4

Department of Sociology
Faculty of Arts
5-21 HM Tory Building, Telephone (403) 432-5234

January 22, 1987

<name>

Dear Chief Executive Officer:

Earlier this month you received a survey questionnaire directed to chief executive officers of health facilities in Canada. If you have already returned the questionnaire, I thank you. If not, could you please complete and return it to the Department of Sociology as soon as possible.

I consider your participation to be very important to the success of this survey. Although the response to date has been most encouraging, it is important to obtain the maximum number of responses in order to have accurate information about administrators of health facilities in Canada.

You may recall that the cover letter attached to the survey questionnaire advised you that the outside envelope had been numbered in order to send reminders to those who did not respond on the initial mailing. To protect the confidentiality of your response, the secretary in the Department separates the questionnaires from the envelopes before I receive them so that individual respondents cannot be identified. If your numbered envelope has not been returned to the Department in three weeks time, I will be sending you another questionnaire on the assumption that the original one was misplaced.

If you have any questions or problems concerning the questionnaire, please feel free to call me at (403) 432-6416 (office) or (403) 434-9843 (home).

Sincerely yours,

Janet L. Storch, R.N., M.H.S.A.
Doctoral candidate, Department of
Sociology, and Associate Professor,
Department of Health
Services Administration and Community Medicine,
University of Alberta

University of Alberta
Edmonton
Canada T6G 2H4

Department of Sociology
Faculty of Arts
5-21 HM Tory Building, Telephone (403) 432-5234

February 26, 1987

<name>

Dear Chief Executive Officer:

In early January I wrote to you requesting your assistance in a study of chief executive officers of hospitals across Canada. As of today, I have not received your completed questionnaire.

The large number of questionnaires returned to date is very encouraging. But whether I will be able to describe accurately how chief executive officers see themselves in relation to their occupation, and how their work experience and their education influence their attitudes, depends upon you and the others who have not responded. This is because it is possible that those of you who have not yet sent in completed questionnaires may hold quite different attitudes about your occupation than those who have already replied.

Because your reply is so significant to the success of the study, I am sending you another questionnaire in the event that you misplaced the first one. I would ask that you complete and return it as soon as possible, preferably within the coming week.

As previously promised, all replies will be kept confidential. Your return envelope has been assigned a number for the purpose of following up non-respondents and to ensure that participants receive a summary of results when the study is completed. The envelope with your completed questionnaire will be opened by a secretary who will separate the questionnaires from the envelopes before giving them to me. Thus, the number cannot be linked to the completed questionnaire.

Your contribution to the success of the study will be very much appreciated.

Cordially,

Janet L. Storch, R.N., M.H.S.A.
Doctoral candidate, Department of Sociology,
and Associate Professor, Department of Health
Services Administration and Community Medicine,
University of Alberta

APPENDIX C

PRE-TEST QUESTIONNAIRE

PRETEST QUESTIONS

Please comment on the following:

I. HOW LONG DID IT TAKE YOU TO COMPLETE THE QUESTIONNAIRE?

II. TECHNICAL ASPECTS OF THE QUESTIONNAIRE:

a) Is the cover letter clear, informative, inviting?

b) Is the format inviting?

c) Is the ordering of the questionnaire logical and easy to follow?

d) Are the instructions clear?

e) Are any questions ambiguous?

f) Do any questions seem biased or out of place?

g) Is the time requirement too demanding for the average CEO?

III. SUBSTANCE:

a) Have you now told me how you see yourself as a hospital CEO?

b) Have you had a chance to tell me the important aspects of your education and your work experience?

APPENDIX D

CODEBOOK

CODE BOOK FOR CEO SURVEY

CARD 1

COLUMNS	VARIABLE	DESCRIPTION
1-3	VAR001	EXECUTIVE IDENTITY NUMBER
4	VAR002	CARD NO. 1
5-6	VAR003	YEARS EMPLOYED BY HOSPITAL NR=99
7-8	VAR004	YEARS EMPLOYED IN HEALTH CARE NR=99
9-10	VAR005	NO. OF ORGANIZATIONS NR=99
11-12	VAR006	PROVINCE B.C. = 01 QUE. = 06 ALTA.= 02 N.B. = 07 SASK. = 03 N.S. = 08 MAN. = 04 P.E.I. = 09 ONT. = 05 NFLD. = 10 NR = 99
13	VAR007	PRESENT POSITION TITLE PRESIDENT = 1 BUS MNGR. = 5 EXEC DIR = 2 AED = 6 ADMIN. = 3 DIRECTOR = 7 SUPERINT. = 4 OTHER = 8 NR = 9
14-15	VAROO8	POSITION ONE PAST PRES/CEO/ADMIN = 01 VP/AED/ASSOC.ADMIN = 02 ASSISTANT ADMIN. = 03 DEPARTMENT HEAD = 04 EXECUTIVE ASSISTANT = 05 STAFF POSITION (HOSP) = 06 STAFF POSITION (GOVT) = 07 PROF POSITION (NONHOSP) = 08 TECHNICAL STAFF = 09 STUDENT = 10 NON-HEALTH EXECUTIVE = 11 NON-HEALTH MANAGER = 12 NON-HEALTH MANAGER = 13 OTHER = 14 NR = 99

COLUMNS	VARIABLE	DESCRIPTION
16-17	VAR009	POSITION TWO PAST Code same as VAR 008
18-19	VAR010	POSITION THREE PAST Code same as VAR 008
20-21	VAR011	POSITION FOUR PAST Code same as VAR 008
22-23		VAR012 TYPE OF FACILITY GENERAL HOSPITAL = 01 SPECIAL HOSPITAL = 02 ACUTE & SPECIAL = 03 TEACHING HOSPITAL = 04 MULTI-SERVICE = 05 CHRONIC/REHAB/LTC = 06 MENT. HANDICAPPED = 07 HLTH/HOSP COUNCIL = 08 HOSPITAL ASSOC = 09 GOVT/MINISTRY HLTH = 10 UNIVERSITY/COLLEGE = 11 CLINIC/COMM HEALTH = 12 MEDICAL PRACTICE = 13 CA FIRM = 14 CONSULTANT (PRIV) = 15 PRIV. SECT. BUS. = 16 OTHER = 17 NR = 99
24-25	VAR013	TYPE ORG. ONE PAST Code same as VAR 012
26-27	VAR014	TYPE ORG. TWO PAST Code same as VAR 012
28-29	VAR015	TYPE ORG. THREE PAST Code same as VAR 012
30-31	VAR016	TYPE ORG. FOUR PAST Code same as VAR 012
32-33	VAR017	YRS. PRESENT POSTION NR = 99
34-35	VARO18	YRS. POSITION ONE PAST NR = 99
36-37	VAR019	YRS. POSITION TWO PAST NR = 99
38-39	VAR020	YRS. POSITION THREE PAST NR = 99
40-41	VAR021	YRS. POSITION FOUR PAST NR = 99

COLUMNS	VARIABLES	DESCRIPTION
42	VAR022	RATED BED SIZE 100-249 = 1 250-499 = 2 500-749 = 3 OVER 750 = 4 OTHER = 5 NR = 9
43-44	V023	TYPE OF FACILITY ACUTE CARE = 01 PED. CARE = 02 MATERNITY = 03 PSYCHIATRIC = 04 CHRONIC = 05 CONVALESCENT = 06 REHABILITAT = 07 EXT. CARE = 08 MENT. HAND. = 09 ACUTE/EXTEND = 10 EXTEND/REHAB = 11 MULTI-SERVICE = 12 OTHER = 13 NR = 99
45	V024	TEACHING HOSPITAL YES = 1 NO = 2 NR = 9
46	VAR025	CCHSE YES = 1 NO = 2 NR = 9
47	VAR026	ACHA/E
48	VAR027	REGIONAL/PROV/HA ASSOC YOUNG HEALTH EXECS./ETC
49	VARO28	MEDICAL ASSOC/COLLEGE
50	VAR029	NURSING ASSOC/COLLEGE
51	VAR030	OTHER HEALTH OCCUPATIONS ASSOC.
52	VAR031	DISEASE/AGE SPECIFIC ASSOC.
53	VAR032	PUBLIC HEALTH ASSOC.
54	VARO33	INSTITUTE PUBLIC ADMIN.
55	VAR034	INSTITUTE CHART ACCOUNT/CERT/MANG.
56	VAR035	FINANCIAL MNGT./ECONOMICS

COLUMNS	VARIABLES	DESCRIPTION
57	VAR036	MNGMT. ASSOC. GEN.
58	VAR037	HSA PROG. ALUMNI ASSOC.
59	VAR038	ASSOC. PROF ENGINEER
60	VAR039	OTHER
61	VAR040	TOTAL NO. OCCUP. ASSOC. NONE = 0
62-80		BLANK

CARD 2

1-3	VAR041	CEO ID.
4	VAR042	CARD NO. 2
		EDUCATION
5	VAR043	Ph.D. YES = 1 NO = 9
6-7	VAR044	MASTERS DEGREE
		MHSA,MHA,DHA(TOR.) = 01
		MBA = 02
		MPA = 03
		MPH = 04
		MA = 05
		MSc. = 06
		MN = 07
		M PHARM. = 08
		MSW = 09
		M THEOLOGY = 10
		M.ED./ED.ADMIN. = 11
		MORE THAN ONE = 12
		MORE THAN ONE & HSA = 13
		NORTHLANDS OPEN = 14
		OTHER = 15
		NO MASTERS = 99
8	VAR045	POST-GRAD DIPLOMA
		HSA = 1
		BUS. = 2
		PUB. ADMIN. = 3
		TEACHING = 4
		PSYCHIATRY = 5
		NURSING/PHN = 6
		PHARM = 7

COLUMNS	VARIABLES	DESCRIPTION
8	VAR045	OTHER = 8 NONE = 9
9-10	VAR046	BACCAULAURATE BHA = 01 B.BUS/B.ADMIN. = 02 B.COMM. = 03 B.A. = 04 BSc. = 05 BSc.N. = 06 B.Pharm. = 07 B.Admin(North) = 08 B.Agric. = 09 B.Physio = 10 MORE THAN 1 = 12 OTHER = 13 NONE = 99
11	VAR047	M.D. YES = 1 NO = 9
12	VAR048	MED SPECIALTY YES = 1 NO = 9
13	VAR049	CHARTERED ACCOUNTANT C.A. = 1 R.I.A. = 2 C.G.A. = 3 C.M.A. = 4 NR = 9
14	VAR050	FULL TIME DIPLOMA/CERTIFICATE R.N. = 1 R.P.N. = 2 DIP.PHARM. = 3 PHYSIO = 4 R.T./R.L.T. = 5 OTHER = 6 BUSINESS = 7 MORE THAN 1 = 8 NONE = 9
15	VAR051	HOME STUDY HSA CERTIF. HOM/HSM = 1 SASK. HOM = 2 OTHER = 3 MORE THAN 1 = 4 NONE = 9

COLUMNS	VARIABLES	DESCRIPTION
16	VAR052	HOME STUDY HEALTH CARE LONG TERM CARE = 1 DEPT MANAGMENT = 2 NRSG UNIT ADMIN = 3 HEALTH RECORDS = 4 OTHER = 6 MORE THAN 1 = 7 NONE = 9
17	VAR053	NON-HEALTH CERT. HOME OR SHORT COURSE ACCOUNTING = 1 BUS/PERSONNEL = 2 MORE THAN 1 = 3 OTHER = 4 NONE = 9
18-19	VAR054	LENGTH OF STUDY HSA _ _ MONTHS NONE = 99
20-21	VAR055	LENGTH OF STUDY BUSINESS _ _ MONTHS NONE = 99
22-23	VAR056	LENGTH OF STUDY HLTH PROF. _ _ MONTHS NONE = 99
24-25	VAR057	LENGTH OF STUDY GENERAL _ _ MONTHS NONE = 99
26-27	VAR058	YEAR MHA,DHA,MHSA _ _ YEAR NONE = 99
28-29	VAR059	YEAR HOM,HSM,SASK _ _ YEAR NONE = 99
30-31	VAR060	YEAR MBA,MPA (BUS.) _ _ YEAR NONE = 99
32-33	VAR061	YEAR C.A., C.M.A. _ _ YEAR NONE = 99
34-35	VAR062	YEAR M.D. _ _ YEAR NONE = 99
36-37	VAR063	YEAR HIGHEST QUALIF HLTH PROF (NON-M.D.) _ _ YEAR NONE = 99
38-39	VAR064	YEAR HIGHEST QUALIF HSA _ _ YEAR NONE = 99

COLUMNS	VARIABLES	DESCRIPTION
40-41	VAR065	YEAR HIGHEST BUSINESS QUALIF. _ _ YEAR NONE = 99
42-43	VAR066	YEAR HIGHEST QUALIF. GENERAL _ _ YEAR NONE = 99
44	VAR067	ACTIVELY WORKING TOWARD QUALIF. YES = 1 NO = 2 NR = 9
45	VAR068	PLANS FOR FURTHER HSA EDUCATION YES = 1 NO = 2 UNCERTAIN = 3 NR = 9
46	VAR069	EDUCATION CONFERENCES ATTENDED NONE = 1 1-3 = 2 4-6 = 3 MORE THAN 6 = 4 NR = 0
47-48	VAR070	ROLE/RESPONSIBILITY OF CEO - FIRST 01 = QUALITY OF CARE/PATIENT CARE 02 = FINANCIAL MNGT./FUNDING 03 = STRATEGIC PLANNING/MEET COMM. NEEDS 04 = PEOPLE MANAGEMENT/COMMUN/MOTIVATION 05 = RESP. TO BOARD/ADVISE,REPORT,REPRESENT 06 = EXTERNAL RELATIONS TO GOVT.,COMM.,PR. 07 = LIASON/COMMUN.-BOARD,STAFF,PUBLIC 08 = POLICY DEVELOPMENT/FORMULATION 09 = POLICY IMPLEMENTATION/EXECUTE GOALS 10 = COORDINATION OF RESOURCES/FACILITATE 11 = LEADERSHIP/CLIMATE OF GROWTH/ EXCELLENCE/DEVELOP SENIOR STAFF 12 = WORKING WITH/MANAGING MED STAFF 13 = DAY TO DAY OPERATIONS/EFFICIENT 14 = PLAN,ORGANIZE,DIRECT,CONTROL(PODSCORB) 15 = RESEARCH/EDUCATION 16 = MEET STANDARDS/REGULATIONS/LEG. 17 = OTHER 18 = RESOURCE ALLOCATION 19 = SURVIVAL OF ORGANIZATION 20 = PROMOTION OF HEALTH OF COMM. 21 = RESEARCH/TEACHING 88 = INAPPROPRIATE RESPONSE 99 = NR

COLUMNS	VARIABLES	DESCRIPTION
49-50	VAR071	ROLE/RESPONSIBILITY OF CEO - SECOND CODE SAME AS VAR070
51-52	VAR072	ROLE/RESPONSIBILITY OF CE0 - THIRD CODE SAME AS VAR070
53-54	VAR073	MAJOR PROBLEMS OF CE0 - ONE 01 = FISCAL CONSTRAINTS/FUNDING SYSTEM 02 = OTHER CONSTRAINTS/TIME,PERSONNEL INABILITY TO MEASURE OUTCOMES 03 = MEDICAL STAFF POWER/DEMANDS/REL. 04 = LACK OF CONTROL/POWERLESSNESS RESP. FOR MUCH BEYOND CEO CONTROL 05 = UNIONIZATION IMPOSING CONSTRAINTS 06 = POLITICAL NATURE OF SYSTEM 07 = LACK OF GOVT. PLANNING,STANDARDS COMMITMENT 08 = DEALING WITH GOVT. BUREAUCRACY/ NO INCENTIVES/EXCESSIVE REGS. 09 = SLOWNESS TO EFFECT CHANGE 10 = BALANCING DEMANDS/NEEDS & RESOURCES 11 = ACHEIVING CONSENSUS/UNITY OF PURPOSE 12 = COMPLEXITY OF ORGANIZATION 13 = PEOPLE MANAGMENT/MAINTAINING COMMUN. 14 = OTHER 15 = LACK OF DATA 16 = RAPID RATE OF CHANGE OF ENVIRONMENT 17 = SETTING PRIORITIES, TIME MANAGEMENT 18 = APATHETIC STAFF/RESISTANCE TO CHANGE 19 = UNEDUCATED BOARD MEMBERS 99 = NR
55-56	VARO74	MAJOR PROBLEMS OF CEO - TWO CODE SAME AS VARO73
57-58	VAR075	MAJOR PROBLEMS OF CEO - THREE CODE SAME AS VARO73
59-60	VAR076	MOST IMPORTANT KNOWLEDGE - ONE 01 = PEOPLE SKILLS/HR/MOTIVATING/COMMUN. 02 = FISCAL MANAGEMENT 03 = UNDERSTANDING HEALTH PROFESSIONALS 04 = UNDERSTAND COMPLEX ORGS./ORG THEORY 05 = MANAGEMENT ABILITY/DELEGATION/OPERATE 06 = HOW TO WORK WITH GOVT./HOW GOVT. WORKS 07 = HOW TO LEAD/SET CLIMATE/DEVELOP STAFF 08 = HOW TO THINK/PROBLEM SOLVE/CONCEPTUAL 09 = KNOW HEALTH CARE SYSTEM/ENVIRONMENT 10 = KNOW SELF/LIMITATIONS 11 = COMMONSENSE, STREET SENSE 12 = POLITICAL KNOW-HOW

COLUMNS	VARIABLES	DESCRIPTION
59-60	VAR076	13 = KNOW HOW TO WORK WITH BOARD 14 = KNOW HOW TO SET PRIORITIES/ORGANIZE 15 = OTHER 16 = PUBLIC RELATIONS SKILLS 17 = MANAGEMENT INFORMATION 18 = LAWS, LABOR RELATIONS 19 = ECONOMICS, STATS, 20 = CHANGING HEALTH CARE NEEDS 21 = GENERAL KNOWLEDGE/AS MUCH AS POSS. 22 = ABILITY TO MAKE DECISIONS 23 = TIME MANAGEMENT 24 = UNDERSTANDING PRODUCT 25 = INTERAGENCY COOPERATION 26 = EXPERIENCE 99 = NR
61-62	VARO77	MOST IMPORTANT KNOWLEDGE - TWO CODE SAME AS VAR076
63-64	VAR078	MOST IMPORTANT KNOWLEDGE - THREE CODE SAME AS VARO76
65-66	VAR079	BEST PREPARATION FOR HA ROLE 01 = GENERAL KNOWLEDGE AND EXPERIENCE 02 = EXPERIENCE IN HEALTH CARE OR INDUSTRY 03 = FORMAL EDUCATION AND WORK EXPERIENCE 04 = BACC (HUM) AND WORK EXPERIENCE 05 = B.COMM,B.BUS.,B.ADMIN 06 = HEALTH PROF. EDUC AND WORK EXPERIENCE 07 = HEALTH PROF. EDUC AND BHA,MHSA,MHA 08 = MHA,MHSA WITH/WITHOUT WORK EXPERIENCE 09 = MBA WITH/WITHOUT WORK EXPERIENCE 10 = MBA/MHA WITH WORK EXPERIENCE 11 = MASTERS HEALTH CARE PLUS WORK EXPER. 12 = UNIVERSITY HSA W/WO EXPERIENCE 13 = FINANCE/BUSINESS W/W0 EXPERIENCE 14 = BUS ADMIN/FINANCE PLUS HSA 15 = ADMIN DEGREE WITH EXPERIENCE 16 = OTHER 99 = NR
67-68	VAR080	WHY ENTERED CAREER 01 = ACCIDENT/CHANCE 02 = OPPORTUNITY AVAILABLE,INVITED 03 = EVOLUTION OF A CAREER/PROGRESSION 04 = CHALLENGING/INTERESTING 05 = HUMANITARIAN SERVICE/HELPING OTHERS 06 = INTERESTED IN HEALTH CARE/MNGMT. 07 = DESIRE TO IMPROVE HEALTH CARE 08 = INFLUENCE OF MENTOR, FAMILY, FRIENDS

COLUMNS	VARIABLES	DESCRIPTION
67-68	VAR080	09 = SEEKING WAYS TO APPLY KNOWLEDGE, INTERESTS, BACKGROUND 10 = WANTED TO BE A PHYSICIAN 11 = GOOD SALARY/PRESTIGE/MOBILITY UPWARDS 12 = ENJOY WORKING WITH PEOPLE 13 = OTHER 14 = TOLD TO/REQUESTED TO BY SUPERIOR 15 = SUITS PERSONALITY 16 = EARLY EXPERIENCE 99 = NR
69-70	VAR081	REVISED EXPECTATIONS 01 = NO CHANGE 02 = EXCEEDED EXPECTATIONS/CHALLENGING 03 = CAREER MORE COMPLEX THAN EXPECTED 04 = MORE DIFFICULT TO MAKE CHANGE THAN EXPECTED 05 = LESS LATITUDE FOR ACTION THAN EXPECTED, LESS POWER 06 = MORE GOVERNMENT CONTROL AND INFLUENCE THAN EXPECTED 07 = MORE SELF INTEREST/ CONFLICT THAN EXPECTED 08 = INCREASING FINANCIAL CONSTRAITS TAKE FUN OUT OF IT 09 = CONTINUED LEARNING AN ADVANTAGE 10 = OTHER 11 = PREFER PRIVATE BUSINESS 12 = PREFER CLINICAL PRACTICE 13 = DEMANDS OUTWEIGH REWARDS 14 = HAVE CHANGED APPROACH TO MANAGEMENT 88 = MISSED QUESTION 99 = NR
71-72	VAR082	SIGNIFICANT PERSONS INSIDE HOSPITAL -ONE 01 = CHIEF MEDICAL STAFF 02 = PRESIDENT MEDICAL STAFF 03 = ONE OR ALL VP'S/AED'S/SR.MNGMT/ASSIST 04 = VP/AED MEDICAL, CLINICAL, MEDICAL DIR. 05 = VP/AED PATIENT SERVICE/NURSING/PROGRAM 06 = VP/AED FINANCE/DIR.FINANCE/COMPTROLLER 07 = DIRECTOR OF NURSING/PATIENT CARE DIR. 08 = DEPARTMENT HEADS/CLINICAL HEADS 09 = PATIENTS/PATIENTS FAMILIES 10 = DOCTORS/MEDICAL STAFF 11 = OWNERS 12 = EXEC. SECRETARY 13 = OTHER 14 = PERSONNEL/DIR. HUMAN RELATIONS

CARD 3		VARIABLES DESCRIPTION
71-72	VAR082	15 = HOSPITAL STAFF 88 = MISSED QUESTION 99 = NR
73-74	VAR083	SIGNIFICANT PERSONS INSIDE HOSPITAL - TWO CODE SAME AS V082
75-76	VAR084	SIGNIFICANT PERSONS INSIDE HOSPITAL-THREE CODE SAME AS V082
77-80		BLANK
1-3	VAR085	CEO ID.
4	VAR086	CARD NO. 3
5-6	VAR087	SIGNIFICANT PERSONS OUTSIDE HOSPITAL-ONE 01 = CHAIRMAN OF BOARD 02 = BOARD MEMBERS 03 = MINISTER/DEPUTY MINISTER 04 = ASSISTANT DEPUTY MINISTER/CONSULTANTS 05 = OTHER CEO'S 06 = HOSPITAL ASSOCIATION 07 = DISTRICT/REGIONAL HEALTH COUNCIL 08 = DEANS, UNIVERSITY OFFICIALS/PROF. 09 = COMMUNITY LEADERS/CITIZENS 10 = MEDIA/PRESS 11 = ELECTED POLITICIANS 12 = PATIENTS/FAMILIES OF PATIENTS 13 = OTHER HEALTH PROFESSIONALS 14 = PRIVATE CONSULTANTS 15 = OTHER 16 = SALVATION ARMY/SISTER SUPERIOR 17 = LAWYERS/LABOR EXPERTS/BANKERS 18 = AUXILLARY PRESIDENT 19 = PSYCHIATRIC CONSULTANT 20 = UNION 21 = OTHER BUSINESS EXECUTIVES 22 = POLICE/PAROLE BOARD 23 = WIFE/FAMILY 99 = NR
7-8	VAR088	SIGNIFICANT PERSON OUTSIDE HOSPITAL/TWO CODE SAME AS VAR087
9-10	VAR089	SIGNIFICANT PERSON OUTSIDE HOSPITAL/THREE CODE SAME AS VAR087
11-14		BLANK ATTITUDE SCALES 1 - 7 NR=0

COLUMNS	VARIABLES	DESCRIPTION
15	VAR090	QUESTION 15
16	VAR091	QUESTION 16
17	VAR092	QUESTION 17
18	VAR093	QUESTION 18
19	VAR094	QUESTION 19
20	VARO95	QUESTION 20
21	VAR096	QUESTION 21
22	VAR097	QUESTION 22
23	VAR098	QUESTION 23
24	VAR099	QUESTION 24
25	VAR100	QUESTION 25
26	VAR101	QUESTION 26
27	VAR102	QUESTION 27
28	VAR103	QUESTION 28
29	VAR104	QUESTION 29
30	VAR105	QUESTION 30
31	VAR106	QUESTION 31
32	VAR107	QUESTION 32
33	VAR108	QUESTION 33
34	VAR109	QUESTION 34
35	VAR110	QUESTION 35
36	VAR111	QUESTION 36
37	VAR112	QUESTION 37
38	VAR113	QUESTION 38
39	VAR114	QUESTION 39

COLUMNS	VARIABLES	DESCRIPTION
40	VAR115	QUESTION 40
41	VAR116	QUESTION 41
42	VAR117	CASE: PATIENT MEDICATION ERROR 0 = NR 1 = STATEMENT BUT NO POSITION/OR UNCLEAR 2 = NO ACTION/ASSUMES TRUTH TOLD? MED ERROR=DRUG ERROR QA/INCIDENT REPORT ACTIVITIES 3 = DO NOTHING/CLEAR TRUTH NOT TOLD SUPPORT OR REPRIMAND STAFF QA ACTIVITIES 4 = REFER TO COMMITTEE (PHARM/THERAP) 5 = BE PREPARED TO RESPOND/INFORM BD.CHAIRMAN/SOLICITOR/INSURERS 6 = ENCOURAGE STAFF TO DISCLOSE 7 = ENSURE PATIENT IS TOLD TRUTH 8 = OTHER
43-44	VAR118	REASONS 00 = NR 01 = QUALITY ASSURANCE ACTIVITIES/ INCIDENT REPORTS/INVESTIGATION 02 = ON ALERT/CONTACT SOLICITOR/ BOARD CHAIRMAN/INSURERS 03 = BE READY FOR MEDIA 04 = CONTACT MEDIA 05 = BEST INTERESTS OF HOSPITAL/PHYS/ PATIENT SERVED BY KEEPING QUIET 06 = PATIENT/FAMILY HAVE RIGHT TO KNOW/ WILL RESPOND TO TRUTH VS. COVER-UP 07 = ERROR WORSE IF DECEPTION DISCOVERED 08 = DON'T BE HELD UP BY NEWSMAN 10 = OTHER

COLUMNS	VARIABLES	DESCRIPTION
45	VAR119	CASE: RESOURCE ALLOCATION 0 = NR 1 = STATEMENT BUT NO POSTION 2 = DO NOTHING OR MAINTAIN SERVICE 3 = PLAN FOR ANOTHER SERVICE 4 = REFER TO COMMITTEE (JOINT CONF., UTILIZATION, PLANNING) 5 = PREPARE STATISTICAL EVIDENCE WITH OPINION/PRESENT TO BOARD/LEAVE TO THEM 6 = RE-EXAMINE MISSION/HIRE CONSULTANT/ LONG RANGE PLANNING EXCERCISE 7 = PREPARE COURSE OF ACTION/SELL TO BOARD AND STAFF 8 = NEGOTIATE WITH BOARD/STAFF/ NEIGHBORING HOSPITALS/ HEALTH COUNCIL/ 9 = CLOSE SERVICE/DISCONTINUE SERVICE
46-47	VAR120	REASONS 00 = NR 01 = RESPONSIBILITY FOR GOOD USE OF RESOURCES KEY 02 = QUALITY OF CARE AT STAKE 03 = INSTITUTIONAL SURVIVAL KEY 04 = BOARD DECISION 05 = PROCESS IMPORTANT/INVOLVE STAFF 06 = HOSPITAL NEEDS TO BE AWARE AND RESPOND TO CHANGING NEEDS 07 = ENHANCING ANOTHER PROGRAM MORE BENEFICIAL/DO WHAT WE DO WELL 10 = OTHER
48	VAR121	CASE: SUSPECTED MEDICAL INCOMPETENCE 0 = NR 1 = STATEMENT BUT NO POSITION 2 = DO NOTHING/MED STAFF BUSINESS/NOT MINE 3 = REFER TO COMMITTEE OR MAC/LEAVE TO THEM 4 = DISCUSS WITH CHIEF OF STAFF/BD.CHAIRMAN PRES. MAC/ LEAVE TO THEM 5 = ENSURE THE FACTS ARE DOCUMENTED/GET FACTS/ INDEPENDENT REVIEW/ MONITOR 6 = PRESSURE MAC TO REVIEW/OR TAKE TO BOARD 7 = GET PHYSICIAN TO RESIGN 8 = OTHER

COLUMNS	VARIABLES	DESCRIPTION
49-50	VAR122	REASONS 00 = NR 01 = PROTECT PATIENTS/QUALITY OF CARE 02 = PROTECT PHYSICIAN/FAIRNESS 03 = PROTECT INSTITUTION/LEGAL ACTION BY PATIENT OR PHYSICIAN 04 = PROTECT SELF/AVOID CONFLICT/MED STAFF 05 = DUTY TO BOARD/BOARD LEGALLY-MORALLY RESPONSIBLE 06 = MEDICAL STAFF RESPONSIBLE FOR PEERS 07 = ANNUAL REAPPOINTMENT NOT TIME TO DEAL WITH ISSUE OF THIS MAGNITUDE 10 = OTHER
51-52	VAR123	AGE __ YEARS NR=99
53	VAR124	GENDER 1 = MALE 2 = FEMALE 9 = NR
54	VAR125	MARITAL STATUS 1 = SINGLE 2 = MARRIED, COMMONLAW 3 = OTHER 9 = NR
55	VAR126	DEPENDENT CHILDREN 1 = YES 2 = NO 9 = NR
56	VAR127	COMMENTS 1 = CLARIFICATION 2 = GREETING 0 = NONE
57-58		BLANK
59-60	VAR128	TOTAL YEARS EDUCATION --MONTHS NONE = 99

ADDENDUM TO CODEBOOK

Calculation of Length of Study

MASTERS STUDY	10 month year x no. of years
M.D.	10 month year x no. of years
P.G.DIPLOMA	08 month year x no. of years
BACCALAURATE	08 month year x no. of years
R.N.	10 month year x no. of years
RRL/RLT	08 month year x no. of years
MED RECORDS	02 months
HOM/HSM	04 months
C.A.	08 months x 3 yrs. if B.Comm. 08 months x 5 yrs. if no B.Comm.
R.I.A.	08 months x 2 yrs.
C.G.A.	08 months x 3 yrs. if no degree 08 months x 2 yrs. if B.A. 08 months x 1 yr. if B.Comm.
C.M.A.	as per C.G.A.
ACCOUNTING	08 months

OTHER CALCULATIONS of NOTE

1. M.S.W. calculated as health professional.
2. M.D. plus specialty, maximum years = 98.
3. B.Comm. counted as business years.

APPENDIX E

LETTER OF PERMISSION

Department of Sociology
518/ 442-4664

State University of New York at Albany

Social Sciences 340, Albany, New York 12222

October 14, 1986

Janet L. Storch
Doctoral Student
Department of Sociology
5-21 Tory Building
University of Alberta
Edmonton, Alberta, Canada
T6G 2H4

Dear Ms. Storch:

You have my permission to use the professionalism scales in your research. A copy of the scales and a paper regarding them are enclosed.

Good luck with your research. I would like to learn of your results.

Sincerely,

Richard H. Hall
Professor

RHH:dn
Enclosures